					ST DEPARTMENT DIVISION O	OF NA					AMEI	FO NDED REPO	RM 3 PRT	
		APP	LICATION	FOR P	PERMIT TO DRILL	L	1. WELL NAME and NUMBER GMBU Q-2-9-15							
2. TYPE (	OF WORK	RILL NEW WELL (1)	neent	ER P&A	WELL DEEPE	N WELL	3. FIELD OR WILDCAT MONUMENT BUTTE							
4. TYPE (		Oil	_		I Methane Well: NO					5. UNIT or COMMU			EEMENT	NAME
6. NAME	OF OPERATOR	<b>t</b>			TION COMPANY					7. OPERATOR PHO	NE	(GRRV)		
8. ADDRI	SS OF OPERA									9. OPERATOR E-MA	IL	16-4825		
	RAL LEASE N		Rt 3 B0x 363		ton, UT, 84052 11. MINERAL OWNE	RSHIP				12. SURFACE OWN		newfield.co	m 	
	L, INDIAN, OF	ML-43538			FEDERAL IND	DIAN [	) STATE (	FEE(	9		DIAN [	STATE	~	FEE ()
		OWNER (if box 1								14. SURFACE OWN		`		
15. ADDI	RESS OF SURF	ACE OWNER (if b	ox 12 = 'fee							16. SURFACE OWN	ER E-M	AIL (if box	12 = 'f	ee')
	AN ALLOTTEE 2 = 'INDIAN')	OR TRIBE NAME			18. INTEND TO COM MULTIPLE FORMATI	IONS			_	19. SLANT				
					YES (Submit C	Comming	gling Applicat	ion) NO (	<u> </u>	VERTICAL DIF	RECTION	IAL 📵	HORIZON	NTAL 🛑
20. LOC	ATION OF WE	LL		FOO'	TAGES	QT	R-QTR	SECT	ION	TOWNSHIP	R	ANGE	ME	RIDIAN
LOCATIO	ON AT SURFAC	CE	20	01 FSL	2053 FWL		NESW	2		9.0 S	1	.5.0 E		S
	ppermost Pro	ducing Zone			1604 FWL		NESW	2		9.0 S		.5.0 E		S
At Total			99		1106 FWL		SWSW	2		9.0 S 15.0 E			S	
21. COUN		DUCHESNE			22. DISTANCE TO N	99	94			23. NUMBER OF AC		DRILLING 20	UNIT	
					25. DISTANCE TO N (Applied For Drilling	g or Coi		SAME POOL	_	26. PROPOSED DEF	<b>PTH</b> : 6429	TVD: 642	29	
27. ELEV	ATION - GROU	JND LEVEL 6029		2	28. BOND NUMBER	B00	1834			29. SOURCE OF DR WATER RIGHTS AP	PROVA		IF APP	LICABLE
					Hole, Casing,	and C	ement Inf	ormation	1					
String Surf	Hole Size	Casing Size 8.625	<b>Length</b> 0 - 300	Weig			Max Mud Wt.         Cement         Sacks           8.3         Class G         138			Yield 1.17	Weight 15.8			
Prod	7.875	5.5	0 - 6429	15.			8.3		Prem	nium Lite High Stre	ngth	306	3.26	11.0
										50/50 Poz		363	1.24	14.3
					A	ТТАСН	IMENTS							
	VERIFY T	HE FOLLOWIN	G ARE ATT	ACHE	D IN ACCORDAN	CE WI	TH THE U	TAH OIL	AND (	GAS CONSERVATI	ON GE	NERAL F	RULES	
<b>w</b> w	ELL PLAT OR	MAP PREPARED E	BY LICENSED	SURV	EYOR OR ENGINEER	R	<b>№</b> сом	IPLETE DR	ILLING	PLAN				
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)								4 5. IF OPI	ERATO	R IS OTHER THAN T	HE LEA:	SE OWNER	ł	
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)								OGRAPHIC	AL MAI	•				
NAME Mandie Crozier TITLE Regulatory Tech									PHOI	NE 435 646-4825				
SIGNATURE DATE 07/29/2011									EMAI	L mcrozier@newfield.	com			
	4BER ASSIGN ()1350911(				APPROVAL				B	ermit Manager				

#### NEWFIELD PRODUCTION COMPANY GMBU Q-2-9-15 AT SURFACE: NE/SW SECTION 2, T9S, R15E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

 Uinta
 0' – 1615'

 Green River
 1615'

 Wasatch
 6220'

 Proposed TD
 6429'

#### 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation (Oil) 1615' – 6220'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Calcium (Ca) (mg/l)

Dissolved Iron (Fe) (ug/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l)

Dissolved Total Solids (TDS) (mg/l)

#### 4. <u>PROPOSED CASING PROGRAM</u>

a. Casing Design: GMBU Q-2-9-15

Size	lı	nterval	Maiaht	Grade	Coupling	Design Factors			
Size	Тор	Bottom	Weight	Grade	Coupling	Burst	Collapse	Tension	
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"	U	300	24.0 J-55		310	17.53	14.35	33.89	
Prod casing	o.	01 0 4001 45.5		1.55	LTC	4,810	4,040	217,000	
5-1/2"	0'	6,429'	15.5	J-55	LTC	2.35	1.98	2.18	

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU Q-2-9-15

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
					(110)	
Surface casing	surface casing 300' Class G w/ 2% CaCl		138	30%	15.8	1.17
			161			
Prod casing	4,429'	Prem Lite II w/ 10% gel + 3%	306	30%	11.0	3.26
Lead	4,429	KCI	998	30%	11.0	3.20
Prod casing	2,000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24
Tail	2,000	KCI	451	30%	14.5	1.24

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to Exhibit C for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 300$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 300$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED</u>:

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

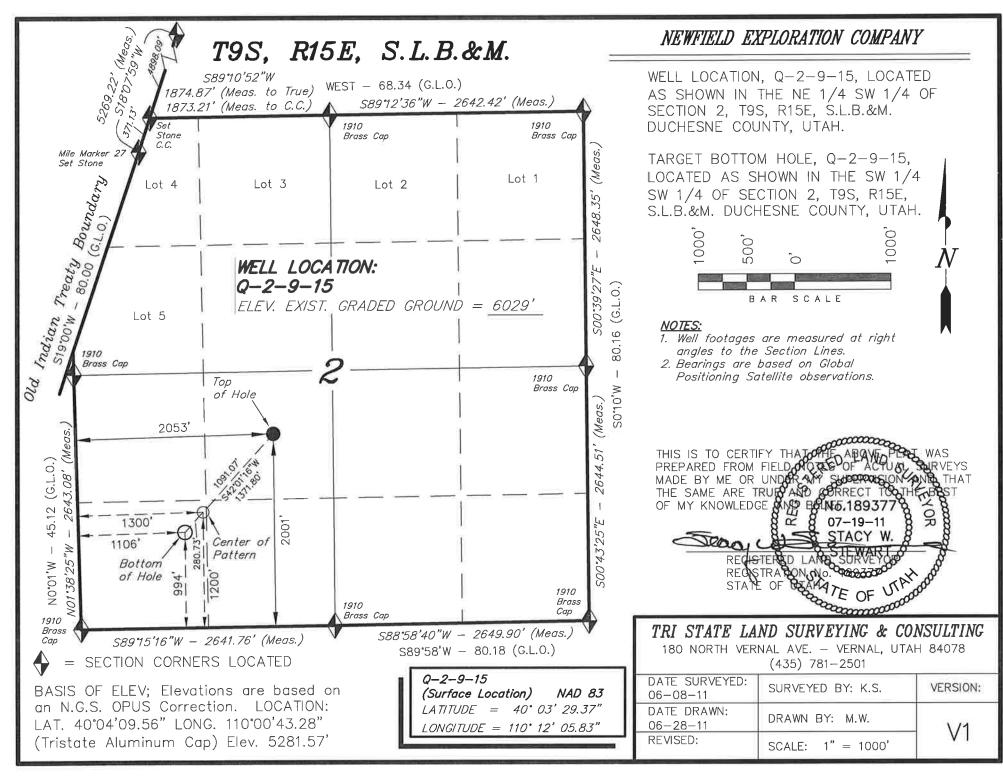
#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

## 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

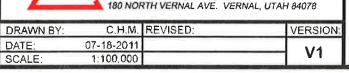
It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

**RECEIVED:** July 29, 2011



API Well Number: 43013509110000 Access Road Map MYTON 13.21 Bench WATON E4.7 mil VALLEY south 1808 PLEASANT £ 0.8 mi. 11-2-9-15 (Existing Well) Q-2-9-15 (Proposed Well) N-2-9-15 (Proposed Well) ± 1.6 mi See Topo "B" Legend Existing Road **NEWFIELD EXPLORATION COMPANY** P: (435) 781-2501 F: (435) 781-2518 N 11-2-9-15 (Existing Well) Tri State Q-2-9-15 (Proposed Well) Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078 N-2-9-15 (Proposed Well) SEC. 2, T9S, R15E, S.L.B.&M. Duchesne County, UT. C.H.M. REVISED: VERSION: SHEET



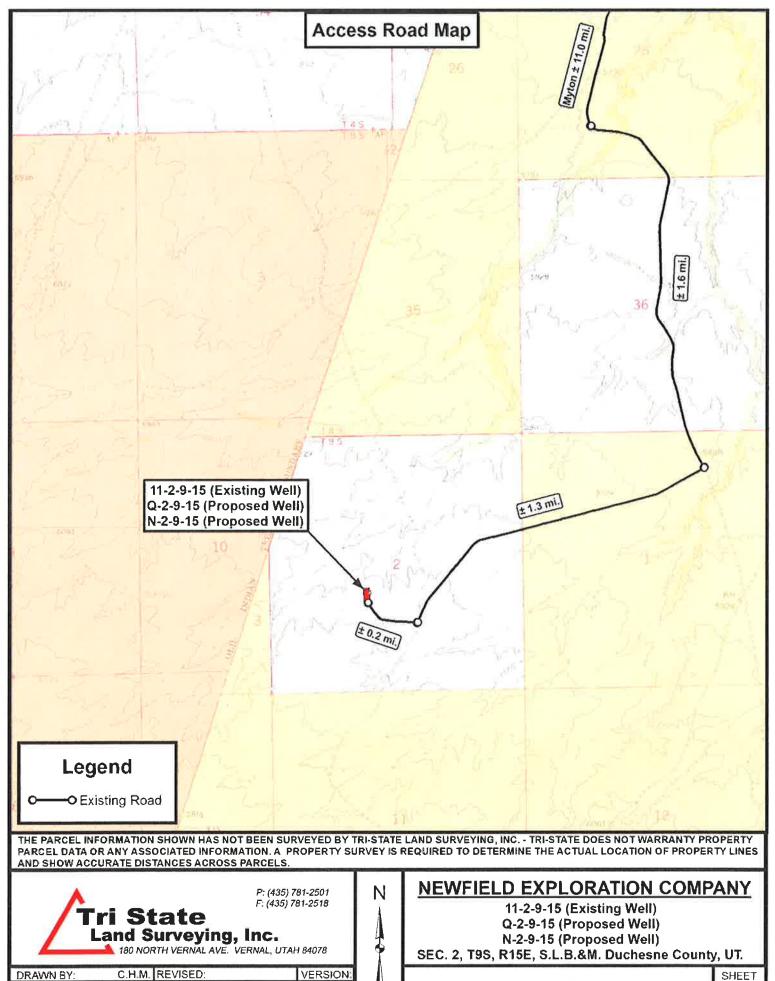
TOPOGRAPHIC MAP

DATE:

SCALE:

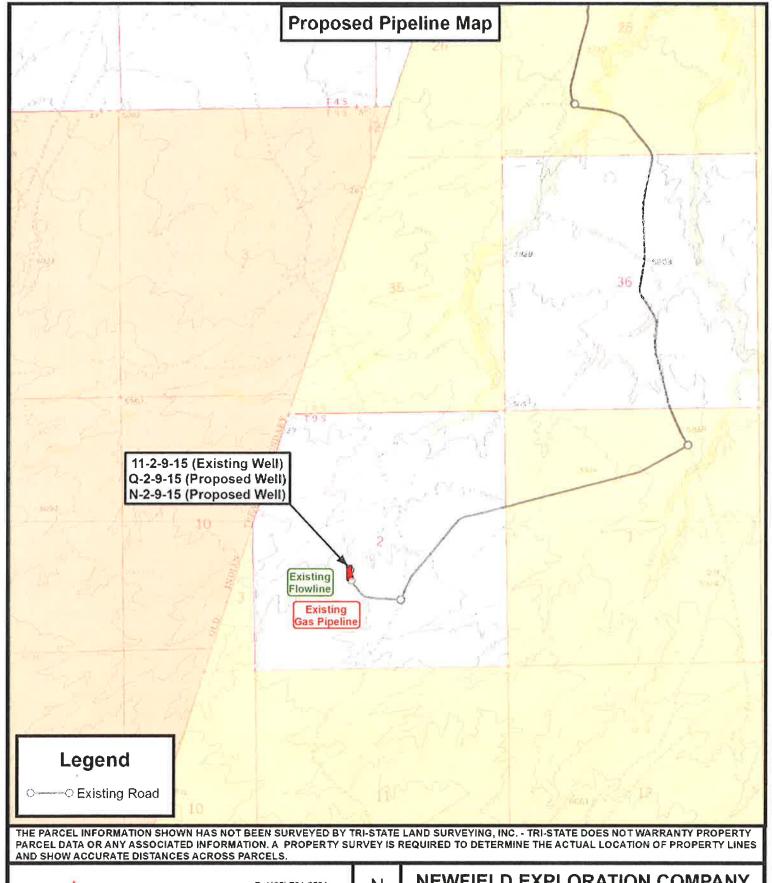
07-18-2011

1" = 2,000



TOPOGRAPHIC MAP

SHEET





DRAWN BY:	C.H.M. REVISED:	VERSION
DATE:	07-18-2011	V/4
SCALE:	1 " = 2.000 '	VI

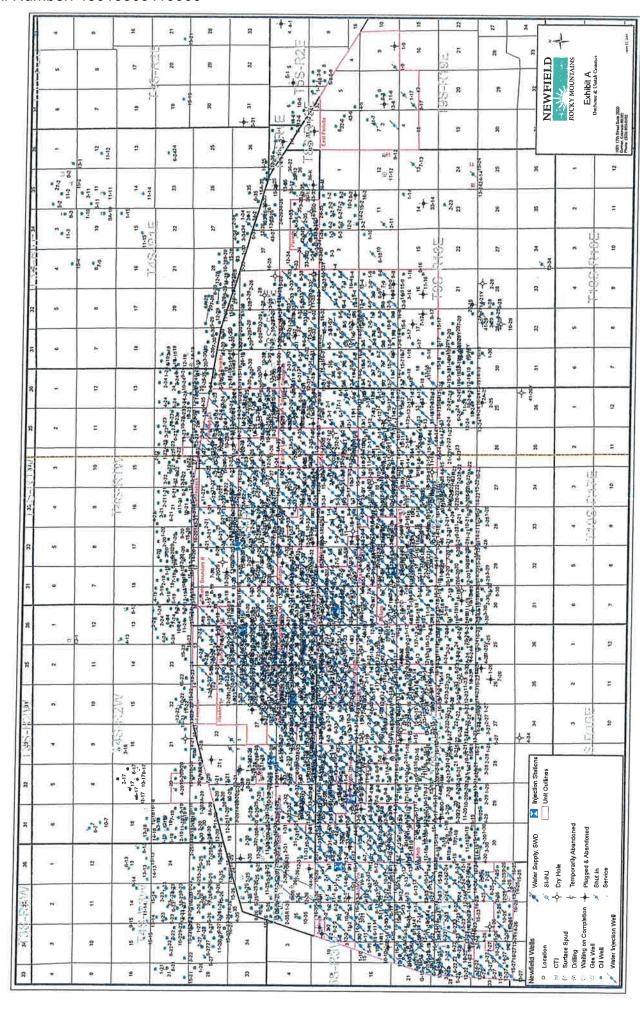
## **NEWFIELD EXPLORATION COMPANY**

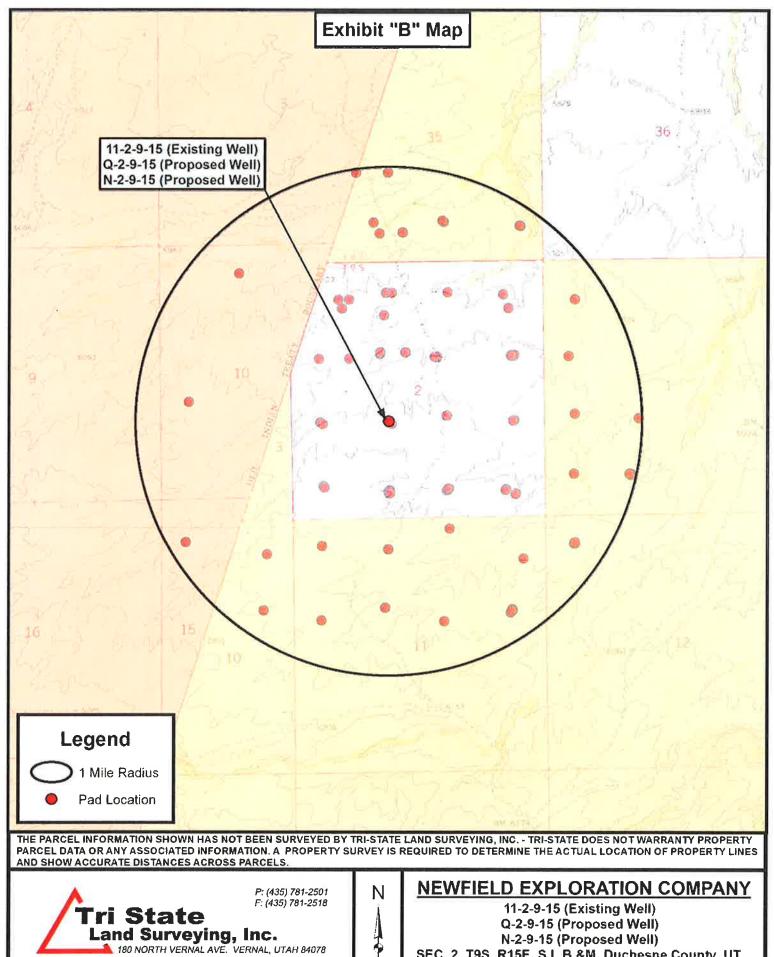
11-2-9-15 (Existing Well) Q-2-9-15 (Proposed Well) N-2-9-15 (Proposed Well)

SEC. 2, T9S, R15E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP







C.H.M. REVISED: DRAWN BY: VERSION: 07-18-2011 DATE: V1 1"= 2,000 SCALE:

SEC. 2, T9S, R15E, S.L.B.&M. Duchesne County, UT.

TOPOGRAPHIC MAP





# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 2 T9, R15 Q-2-9-15

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

20 June, 2011



**RECEIVED:** July 29, 2011



#### PayZone Directional Services, LLC.

Planning Report



Database: EDM 2003.21 Single User Db Company: NEWFIELD EXPLORATION Project: USGS Myton SW (UT) Site: SECTION 2 T9, R15

 Well:
 Q-2-9-15

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Newfield Rig) Q-2-9-15 @ 6041.0ft (Newfield Rig)

Grid

Minimum Curvature

Project USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: US State Plane 1983

Geo Datum: North American Datum 1983

Map Zone: Utah Central Zone

System Datum: Mean Sea Level

Site SECTION 2 T9, R15

Northing: 7,191,145.41 ft 40° 3' 15.350 N Site Position: Latitude: Lat/Long Easting: 2,005,088.49 ft 110° 11' 49.770 W From: Longitude: **Position Uncertainty:** 0.0 ft Slot Radius: **Grid Convergence:** 0.83

Well Q-2-9-15, SHL LAT: 40 03 29.37 LONG: -110 12 05.83

 Well Position
 +N/-S
 1,400.3 ft
 Northing:
 7,192,545.67 ft
 Latitude:
 40° 3′ 29.370 N

 +E/-W
 -1,269.2 ft
 Easting:
 2,003,819.30 ft
 Longitude:
 110° 12′ 5.830 W

Position Uncertainty 0.0 ft Wellhead Elevation: 6,041.0 ft Ground Level: 6,029.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/06/20	11.37	65.78	52,252

Design	Design #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:		Depth From (TVD)	+N/-S	+E/-W	Direction	
		(ft)	(ft)	(ft)	(°)	
		5,200.0	0.0	0.0	222.02	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,593.3	14.90	222.02	1,582.2	-95.4	-86.0	1.50	1.50	0.00	222.02	
5,337.0	14.90	222.02	5,200.0	-810.6	-730.4	0.00	0.00	0.00	0.00	Q-2-9-15
6,428.7	14.90	222.02	6,255.0	-1,019.1	-918.3	0.00	0.00	0.00	0.00	



#### PayZone Directional Services, LLC.

**Planning Report** 



Database: EDM 2003.21 Single User Db Company: NEWFIELD EXPLORATION Project: USGS Myton SW (UT)
Site: SECTION 2 T9, R15

 Well:
 Q-2-9-15

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Newfield Rig) Q-2-9-15 @ 6041.0ft (Newfield Rig)

Grid

Minimum Curvature

esign:	Design #1								
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 1	.50								
700.0	1.50	222.02	700.0	-1.0	-0.9	1.3	1.50	1.50	0.00
800.0	3.00	222.02	799.9	-3.9	-3.5	5.2	1.50	1.50	0.00
900.0	4.50	222.02	899.7	-8.7	-7.9	11.8	1.50	1.50	0.00
1,000.0	6.00	222.02	999.3	-15.5	-14.0	20.9	1.50	1.50	0.00
1,100.0	7.50	222.02	1,098.6	-24.3	-21.9	32.7	1.50	1.50	0.00
1,200.0	9.00	222.02	1,197.5	-34.9	-31.5	47.0	1.50	1.50	0.00
1,300.0	10.50	222.02	1,296.1	-47.5	-42.8	64.0	1.50	1.50	0.00
1,400.0	12.00	222.02	1,394.2	-62.0	-55.9	83.5	1.50	1.50	0.00
1 500 0	13.50	222.02	1,491.7	-78.4	-70.6	105.5	1.50	1.50	0.00
1,500.0 1,593.3	14.90	222.02	1,491.7	-78.4 -95.4	-70.6 -86.0	105.5	1.50	1.50	0.00
			1,302.2	-33.4	-00.0	120.4	1.50	1.50	0.00
1.600.0	hold at 1593.3 N	טו 222.02	1.588.6	06.7	07.1	130.1	0.00	0.00	0.00
1,700.0	14.90 14.90	222.02	1,685.3	-96.7 -115.8	-87.1 -104.3	155.9	0.00 0.00	0.00 0.00	0.00 0.00
1,800.0	14.90	222.02	1,781.9	-134.9	-104.5 -121.5	181.6	0.00	0.00	0.00
1,000.0	14.50	222.02	1,701.9	-134.9	-121.5	101.0	0.00	0.00	0.00
1,900.0	14.90	222.02	1,878.5	-154.0	-138.8	207.3	0.00	0.00	0.00
2,000.0	14.90	222.02	1,975.2	-173.1	-156.0	233.0	0.00	0.00	0.00
2,100.0	14.90	222.02	2,071.8	-192.2	-173.2	258.7	0.00	0.00	0.00
2,200.0	14.90	222.02	2,168.4	-211.3	-190.4	284.4	0.00	0.00	0.00
2,300.0	14.90	222.02	2,265.1	-230.4	-207.6	310.1	0.00	0.00	0.00
2,400.0	14.90	222.02	2,361.7	-249.5	-224.8	335.9	0.00	0.00	0.00
2,500.0	14.90	222.02	2,458.4	-268.6	-242.0	361.6	0.00	0.00	0.00
2,600.0	14.90	222.02	2,555.0	-287.7	-259.2	387.3	0.00	0.00	0.00
2,700.0	14.90	222.02	2,651.6	-306.8	-276.5	413.0	0.00	0.00	0.00
2,800.0	14.90	222.02	2,748.3	-325.9	-293.7	438.7	0.00	0.00	0.00
2,900.0	14.90	222.02	2.844.9	-345.0	-310.9	464.4	0.00	0.00	0.00
3,000.0	14.90	222.02	2,941.5	-364.1	-328.1	490.1	0.00	0.00	0.00
3,100.0	14.90	222.02	3,038.2	-383.2	-345.3	515.8	0.00	0.00	0.00
3,200.0	14.90	222.02	3,134.8	-402.3	-362.5	541.6	0.00	0.00	0.00
3,300.0	14.90	222.02	3,231.5	-421.4	-379.7	567.3	0.00	0.00	0.00
3,400.0	14.90	222.02	3,328.1	-440.5	-396.9	593.0	0.00	0.00	0.00
3,500.0	14.90	222.02	3,424.7	-459.6	-414.2	618.7	0.00	0.00	0.00
3,600.0	14.90	222.02	3,521.4	-478.7	-431.4	644.4	0.00	0.00	0.00
3,700.0	14.90	222.02	3,618.0	-497.8	-448.6	670.1	0.00	0.00	0.00
3,800.0	14.90	222.02	3,714.6	-517.0	-465.8	695.8	0.00	0.00	0.00
3,900.0	14.90	222.02	3,811.3	-536.1	-483.0	721.6	0.00	0.00	0.00
4,000.0	14.90	222.02	3,907.9	-555.2	-463.0	747.3	0.00	0.00	0.00
4,100.0	14.90	222.02	4,004.6	-574.3	-517.4	773.0	0.00	0.00	0.00
4,200.0	14.90	222.02	4,101.2	-593.4	-534.6	798.7	0.00	0.00	0.00
4,300.0	14.90	222.02	4,197.8	-612.5	-551.9	824.4	0.00	0.00	0.00
4,400.0	14.90	222.02	4,294.5	-631.6	-569.1	850.1	0.00	0.00	0.00
4,500.0 4,600.0	14.90	222.02 222.02	4,391.1	-650.7	-586.3 -603.5	875.8	0.00	0.00	0.00
4,600.0 4,700.0	14.90 14.90	222.02	4,487.7 4,584.4	-669.8 -688.9	-603.5 -620.7	901.6 927.3	0.00 0.00	0.00 0.00	0.00 0.00
4,700.0 4,800.0	14.90	222.02	4,584.4 4,681.0	-688.9 -708.0	-620.7 -637.9	927.3 953.0	0.00	0.00	0.00
4,900.0	14.90	222.02	4,777.7	-727.1	-655.1	978.7	0.00	0.00	0.00
5,000.0	14.90	222.02	4,874.3	-746.2	-672.3	1,004.4	0.00	0.00	0.00



#### PayZone Directional Services, LLC.

Planning Report



Database: EDM 2003.21 Single User Db Company: NEWFIELD EXPLORATION Project: USGS Myton SW (UT) Site: SECTION 2 T9, R15

 Well:
 Q-2-9-15

 Wellbore:
 Wellbore #1

 Design:
 Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Newfield Rig) Q-2-9-15 @ 6041.0ft (Newfield Rig)

Grid

Minimum Curvature

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,100.0 5,200.0	14.90 14.90	222.02 222.02	4,970.9 5,067.6	-765.3 -784.4	-689.6 -706.8	1,030.1 1,055.8	0.00 0.00	0.00 0.00	0.00 0.00
5,300.0	14.90	222.02	5,164.2	-803.5	-724.0	1,081.5	0.00	0.00	0.00
5,337.0 Start 1091.7	14.90 hold at 5337.0 M	222.02 ID - Q-2-9-15	5,200.0	-810.6	-730.4	1,091.1	0.00	0.00	0.00
5,400.0	14.90	222.02	5,260.8	-822.6	-741.2	1,107.3	0.00	0.00	0.00
5,500.0 5,600.0	14.90 14.90	222.02 222.02	5,357.5 5,454.1	-841.7 -860.8	-758.4 -775.6	1,133.0 1,158.7	0.00 0.00	0.00 0.00	0.00 0.00
5,700.0	14.90	222.02	5,550.8	-879.9	-792.8	1,184.4	0.00	0.00	0.00
5,800.0 5,900.0	14.90 14.90	222.02 222.02	5,647.4 5,744.0	-899.0 -918.1	-810.0 -827.3	1,210.1 1,235.8	0.00 0.00	0.00 0.00	0.00 0.00
6,000.0	14.90	222.02	5,840.7	-937.2	-844.5	1,261.5	0.00	0.00	0.00
6,100.0 6,200.0	14.90 14.90	222.02 222.02	5,937.3 6,033.9	-956.3 -975.4	-861.7 -878.9	1,287.3 1,313.0	0.00 0.00	0.00 0.00	0.00 0.00
6,300.0	14.90	222.02	6,130.6	-994.5	-896.1	1,338.7	0.00	0.00	0.00
6,400.0 6,428.7	14.90 14.90	222.02 222.02	6,227.2 6,255.0	-1,013.6 -1,019.1	-913.3 -918.3	1,364.4 1,371.8	0.00 0.00	0.00 0.00	0.00 0.00
TD at 6428.7		LLL.UL	0,200.0	1,010.1	310.0	1,57 1.0	0.00	0.00	0.00

Plan Annotations					
Measure	l Vertical	Local Coo	rdinates		
Depth (ft)	Depth (ft)	+N/-S	+E/-W	0	
(11)	(11)	(ft)	(ft)	Comment	
600	.0 600.0	0.0	0.0	Start Build 1.50	
1,593	.3 1,582.2	-95.4	-86.0	Start 3743.7 hold at 1593.3 MD	
5,337	.0 5,200.0	-810.6	-730.4	Start 1091.7 hold at 5337.0 MD	
6,428	.7 6,255.0	-1,019.1	-918.3	TD at 6428.7	



Project: USGS Myton SW (UT) Site: SECTION 2 T9, R15

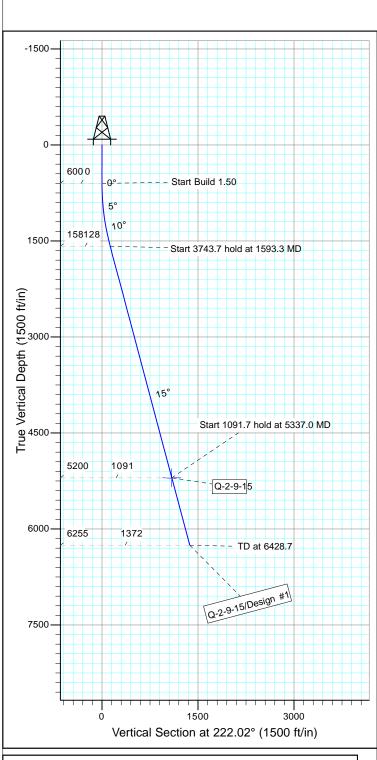
Well: Q-2-9-15 Wellbore: Wellbore #1 Design: Design #1

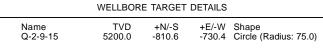
KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



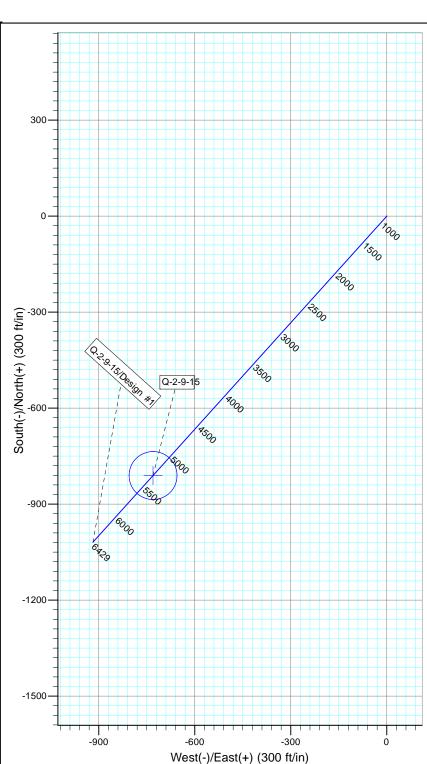
Azimuths to Grid North True North: -0.83° Magnetic North: 10.54°

Magnetic Field Strength: 52252.3snT Dip Angle: 65.78° Date: 2011/06/20 Model: IGRF2010









### SECTION DETAILS

Sec	MD	Inc			+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00			0.0	0.0	0.00	0.00	0.0	
3	1593.3	14.90	222.02	1582.2	-95.4	-86.0	1.50	222.02	128.4	
4	5337.0	14.90	222.02	5200.0	-810.6	-730.4	0.00	0.00	1091.1	Q-2-9-15
5	6428.7	14.90	222.02	6255.0	-1019.1	-918.3	0.00	0.00	1371.8	

# NEWFIELD PRODUCTION COMPANY GMBU Q-2-9-15 AT SURFACE: NE/SW SECTION 2, T9S, R15E DUCHESNE COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU Q-2-9-15 located in the NE 1/4 SW 1/4 Section 2, T9S, R15E, Duchesen County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southwesterly – 6.4 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly – 2.4 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly – 0.8 miles  $\pm$  to it's junction with an existing road to the southeast; proceed southeasterly – 1.6 miles  $\pm$  to it's junction with an existing road to the southwest; proceed southwesterly – 1.3 miles  $\pm$  to it's junction with an existing road to the northwest; proceed northwesterly – 0.2 miles + to the existing 11-2-9-15 well pad.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 11-2-9-15 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. <u>LOCATION AND TYPE OF WATER SUPPLY</u>

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

#### 6. <u>SOURCE OF CONSTRUCTION MATERIALS</u>

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – State of Utah.

#### 11. OTHER ADDITIONAL INFORMATION:

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit #U-03-MQ-0751b,s 11/18/03, prepared by

Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, Wade E. Miller, 7/28/03. See attached report cover pages, Exhibit "D".

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU Q-2-9-15, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU Q-2-9-15, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630

Myton, UT 84052

Telephone: (435) 646-3721

#### Certification

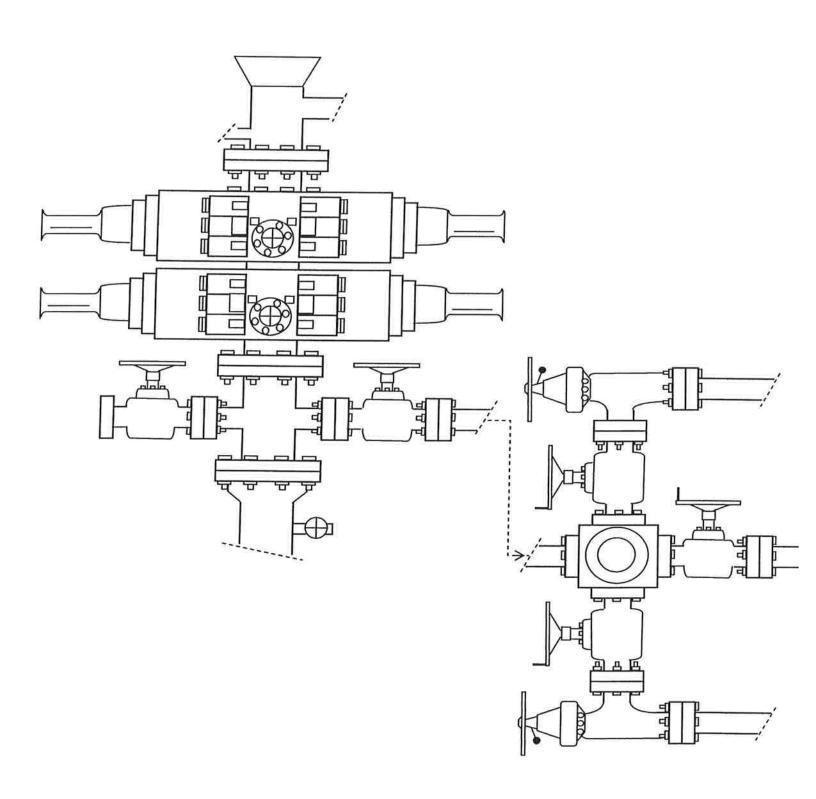
Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #Q-2-9-15, Section 2, Township 9S, Range 15E: Lease ML-43538 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #B001834.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

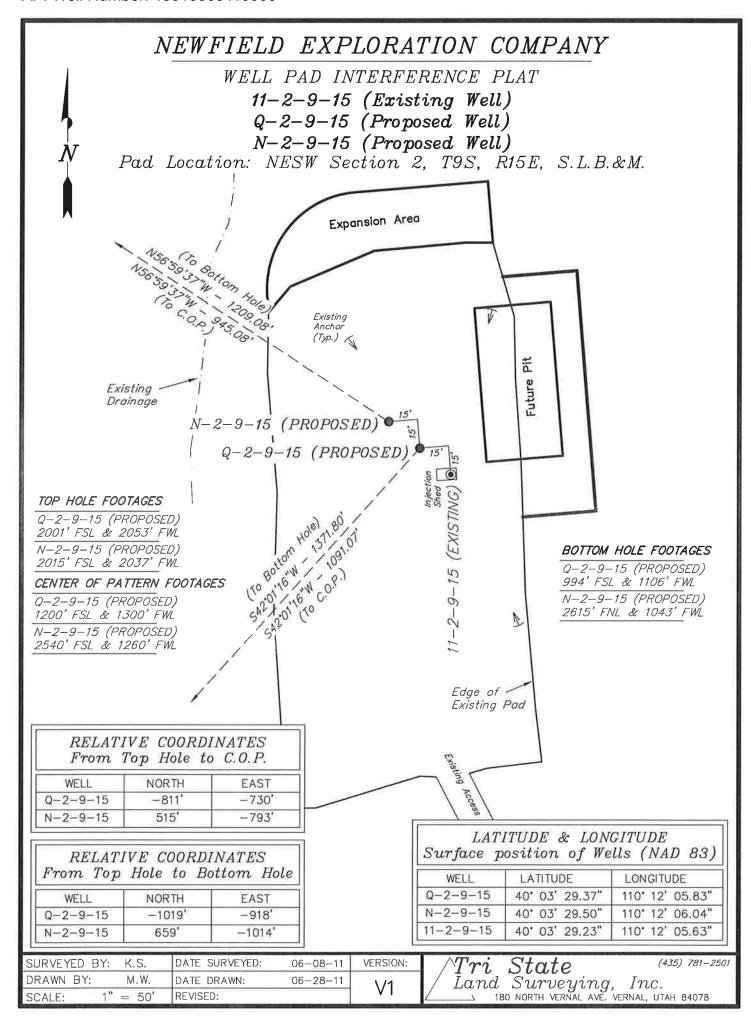
7/29/11	
Date	Mandie Crozier
	Regulatory Specialist
	Newfield Production Company

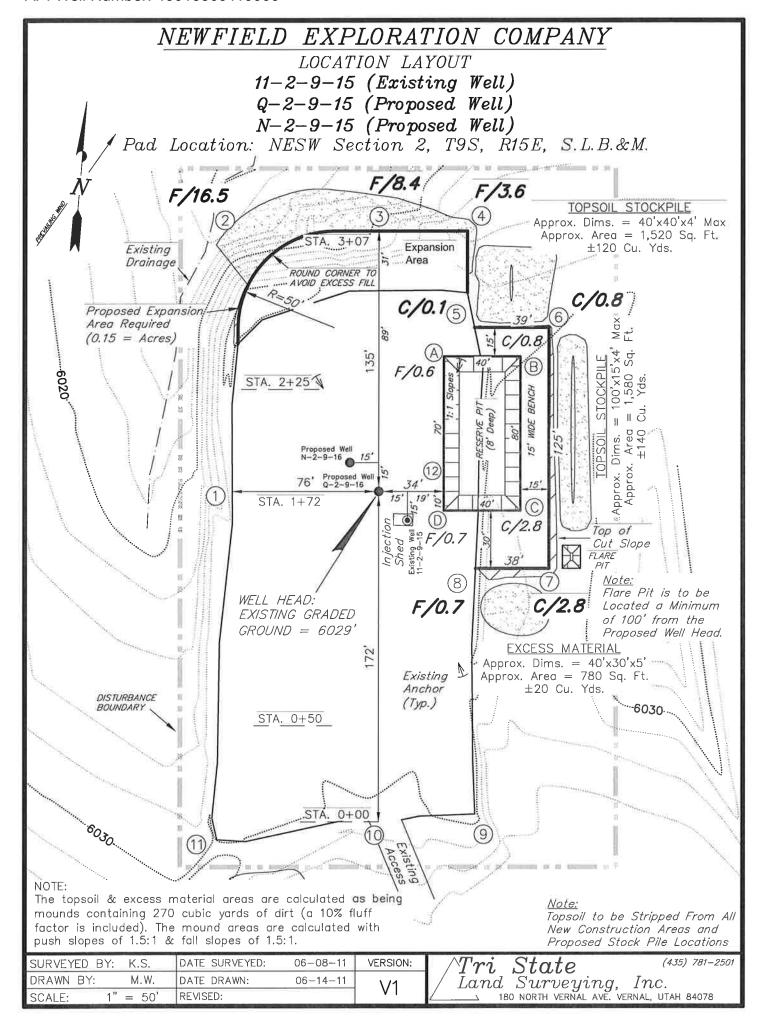
2-M SYSTEM

Blowout Prevention Equipment Systems



**EXHIBIT C** 





## NEWFIELD EXPLORATION COMPANY

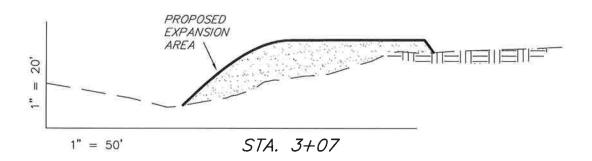
CROSS SECTIONS

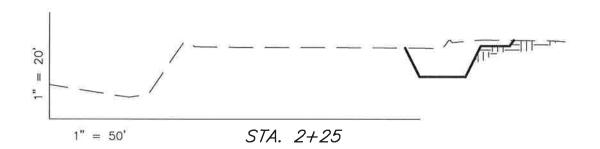
11-2-9-15 (Existing Well)

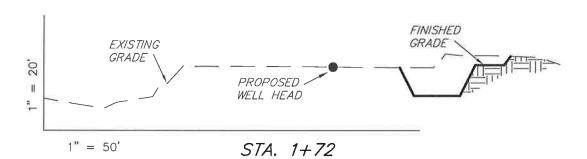
Q-2-9-15 (Proposed Well)

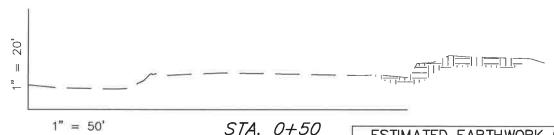
N-2-9-15 (Proposed Well)

Pad Location: NESW Section 2, T9S, R15E, S.L.B.&M.









NOTE: UNLESS OTHERWISE

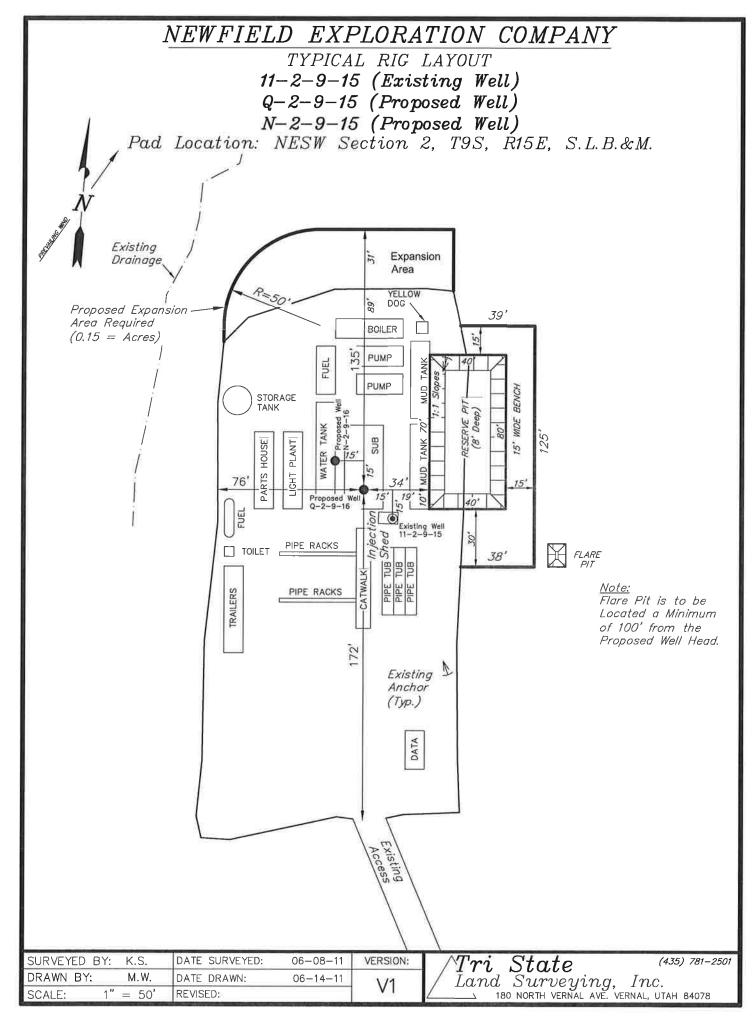
NOTED ALL CUT/FILL SLOPES ARE AT 1.5:1

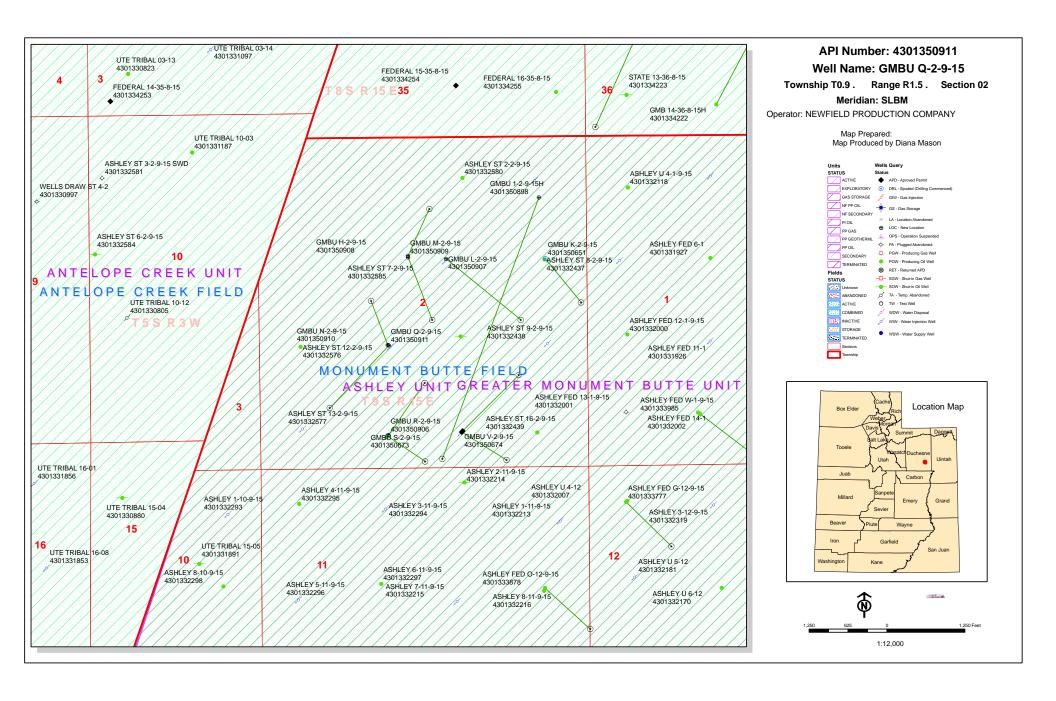
ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	140	810	Topsoil is not included	-670
PIT	690	0	in Pad Cut	690
TOTALS	830	810	220	20

SURVEYED BY:	K.S.	DATE SURVEYED:	06-08-11	VERSION:
DRAWN BY:	M.W.	DATE DRAWN:	06-14-11	\ /1
SCALE: 1"	= 50'	REVISED:		VI

 $egin{array}{lll} egin{array}{lll} Tri & State & ^{(4:35)} & ^{781-2501} \ & Land & Surveying, & Inc. \ & \_ & 180 & NORTH & VERNAL & AVE. & VERNAL, & UTAH & 84078 \ \end{array}$ 





# **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT - 922)

August 3, 2011

Memorandum

Assistant District Manager Minerals, Vernal District To:

From: Michael Coulthard, Petroleum Engineer

2011 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50906 GMBU R-2-9-15 Sec 02 T09S R15E 0561 FSL 2050 FWL BHL Sec 02 T09S R15E 1367 FSL 2620 FEL 43-013-50907 GMBU L-2-9-15 Sec 02 T09S R15E 1977 FNL 2241 FEL

BHL Sec 02 T09S R15E 2357 FSL 1068 FEL

43-013-50908 GMBU H-2-9-15 Sec 02 T09S R15E 1893 FNL 1639 FWL BHL Sec 02 T09S R15E 1171 FNL 2510 FEL

43-013-50909 GMBU M-2-9-15 Sec 02 T09S R15E 1913 FNL 1641 FWL BHL Sec 02 T09S R15E 2377 FSL 2492 FEL

43-013-50910 GMBU N-2-9-15 Sec 02 T09S R15E 2015 FSL 2037 FWL BHL Sec 02 T09S R15E 2615 FNL 1043 FWL

43-013-50911 GMBU Q-2-9-15 Sec 02 T09S R15E 2001 FSL 2053 FWL

BHL Sec 02 T09S R15E 0994 FSL 1106 FWL

This office has no objection to permitting the wells at this time.

Digitally signed by Michael L. Coulthard Michael L. Coulthard DN: cn-Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US Date: 2011.08.03 14:18:49 -06'00'

bcc: File - Greater Monument Butte Unit

Division of Oil Gas and Mining Central Files

Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:8-3-11



#### VIA ELECTRONIC DELIVERY

August 9, 2011

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

GMBU Q-2-9-15

Greater Monument Butte (Green River) Unit

Surface Hole:

T9S-R15E Section 2: NESW (ML-43538)

2001' FSL 2053' FWL

At Target:

T9S-R15E Section 2: SWSW (ML-43538)

994' FSL 1106' FWL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 7/28/2011, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4153 or by email at <a href="mailto:pburns@newfield.com">pburns@newfield.com</a>. Your consideration in this matter is greatly appreciated.

Sincerely,

Newfield Production Company

Peter Burns Land Associate

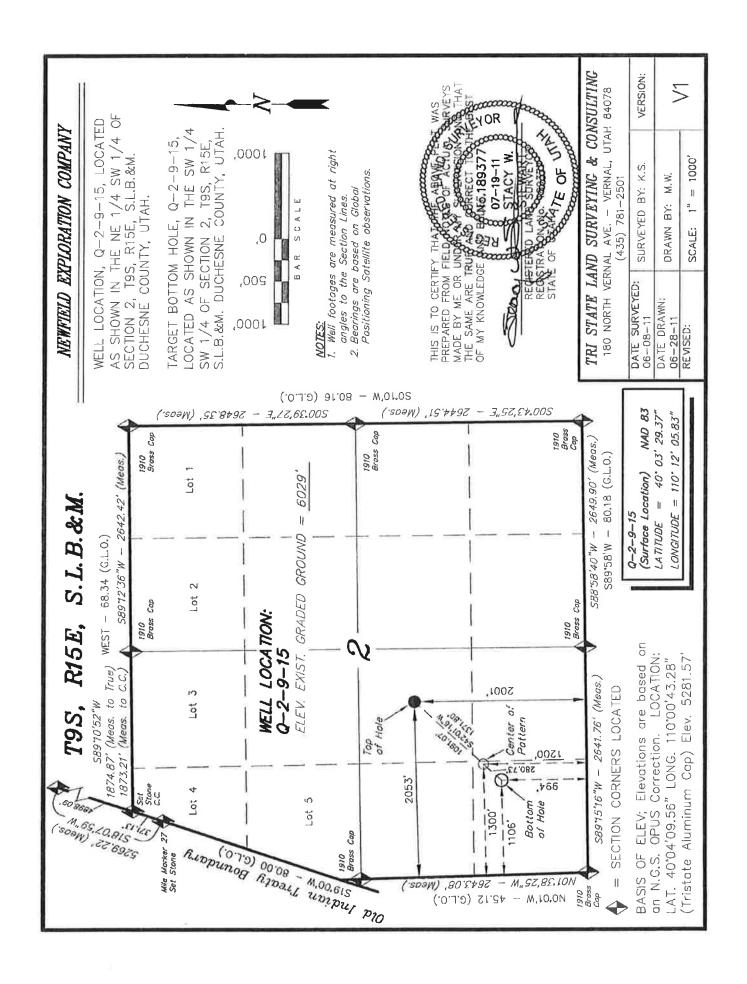
# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

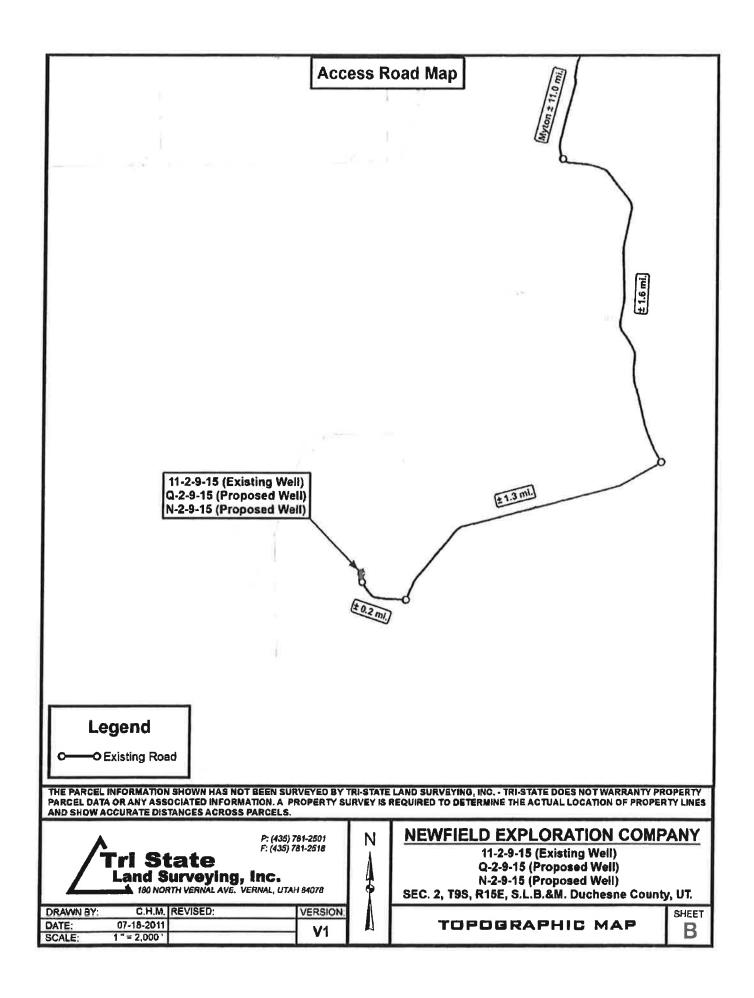
FORM 3
_

DIVISION OF OIL, GAS AND MINING

AMENDED REPORT (highlight changes)

				2551		2 2 2 2 1			5. MINERAL LEASE N	0:	6. SURFACE:	
APPLICATION FOR PERMIT TO DRILL								ML-43538	State			
1A. TYPE OF WORK: DRILL REENTER DEEPEN								7. IF INDIAN, ALLOTTEE OR TRIBE NAME:  NA  8. UNIT or CA AGREEMENT NAME:				
8. TYPE OF WE	ELL: OIL 🗹	GAS 🗌	OTHER		SIN	GLE ZONE 🗹	MULTIPLE ZON	Ε□	8. UNIT of CA AGREE			
2. NAME OF OPE	RATOR:								9, WELL NAME and N	UMBER:		
Newfield P	roduction C	ompany							GMBU Q-2-	9-15		
3. ADDRESS OF OPERATOR: PHONE NUMBER:								10. FIELD AND POOL,		DCAT:		
	Route #3 Box 3630 CITY Myton STATE UT ZIP 84052 (435) 646-3721								Monument B			
	WELL (FOOTAGE								11. QTR/QTR, SECTION MERIDIAN:	ON, TOW	NSHIP, RANGE,	
AT SURFACE:	NE/SW	2001' FSL 2	2053' FWL	Sec. 2	T9S R	15E			NESW 2	98	15E	
AT PROPOSED	PRODUCING ZO	NE: SW/SW	994' FSL	_ 1106' F	-WL	Sec. 2 T9S R	15E					
14. DISTANCE IN	MILES AND DIRE	CTION FROM NEA	REST TOWN OR P	OST OFFICE	ž				12. COUNTY:		13. STATE: UTAH	
Approxim	ately 14.1 r	niles southw	est of Mytor	ı, Utah					Duchesne		OTALL	
15. DISTANCE TO	NEAREST PROF	ERTY OR LEASE L	INE (FEET)	16. N	UMBER O	FACRES IN LEASE:		17. N	UMBER OF ACRES ASS	IGNED T	O THIS WELL:	
Approx. 99	94' f/lse line	, NA' f/unit li	ne				621.07 acres	l	20 acres			
18 DISTANCE TO	NEADEST WELL	ADDITUNG COMB		19. P	ROPOSED	DEPTH:		20. B	OND DESCRIPTION:			
APPLIED FOR Approx. 90	R) ON THIS LEASE	(FEET)					6,429		#B001834			
	and recognition to be a final and the first of the first	R DF, RT, GR, ETC	Y:	22. A	PPROXIM	ATE DATE WORK WI	·	23. E	STIMATED DURATION:			
6029' GL					<u> 3re</u>		<i>3011</i>		5) days from SF	PUD t	o rig release	
24.			PROPOS	SED CAS	SING A	ND CEMENTIN	IG PROGRAM					
SIZE OF HOLE	CASING SIZE,	GRADE, AND WEIG	HT PER FOOT	SETTING	DEPTH		CEMENT TYPE, QUA	ANTITY,	YIELD, AND SLURRY W	/EIGHT		
12 1/4	8 5/8	J-55	24.0		300	Class G w/2	ass G w/2% CaCl 1		sx +/-	1.17	15.8	
7 7/8	5 1/2	J-55	15.5 6,429 Lead(Prem Lite II)				305	sx +/-	3.26	11.0		
						Tail (50/50 F	Poz)	363	sx +/-	1.24	14.3	
				_								
25.			***		ATTA	CHMENTS						
VERIFY THE FOL	LOWING ARE ATT	ACHED IN ACCOR	DANCE WITH THE	UTAH OIL A	ND GAS C	ONSERVATION GENE	ERAL RULE\$:					
_						Len						
WELL PL	AT OR MAP PREP	ARED BY LICENSE	D SURVEYOR OR	ENGINEER			ETE DRILLING PLAN					
<b>✓</b> EVIDENC	E OF DIVISION O	WATER RIGHTS A	APPROVAL FOR US	SE OF WATE	R	☐ FORM 5	5, IF OPERATOR IS PE	RSON C	R COMPANY OTHER T	HAN THE	E LEASE OWNER	
											•	
NAME (PLEASE I	Mandie	Crozier	. 1			TITLE	Regulatory Sp	eciali	st			
SIGNATURE	7/1	ande	· Cros	in		DATE _	7/25/	1)				
(This space for State	te use only)			,								
API NUMBER ASS	SIGNED:			_		APPROVAL:						





From: Jim Davis

To: Hill, Brad; Mason, Diana

CC: Bonner, Ed; Garrison, LaVonne; mcrozier@newfield.com; teaton@newfield...

**Date:** 9/20/2011 3:45 PM **Subject:** Newfield APD approvals

The following APDs have been approved by SITLA including arch and paleo clearance.

4304751877 GMBU I-32-8-18 4304751878 GMBU H-32-8-18 4304751879 GMBU L-32-8-18 4304751880 GMBU R-32-8-18 4304751881 GMBU M-32-8-18 4304751882 GMBU G-32-8-18 4304751883 GMBU N-32-8-18 4304751884 GMBU S-32-8-18 4301350898 GMBU 1-2-9-15H 4301350906 GMBU R-2-9-15 4301350907 GMBU L-2-9-15 GMBU H-2-9-15 4301350908 4301350909 GMBU M-2-9-15 GMBU N-2-9-15 4301350910 4301350911 GMBU Q-2-9-15 Thanks.

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156

-Jim

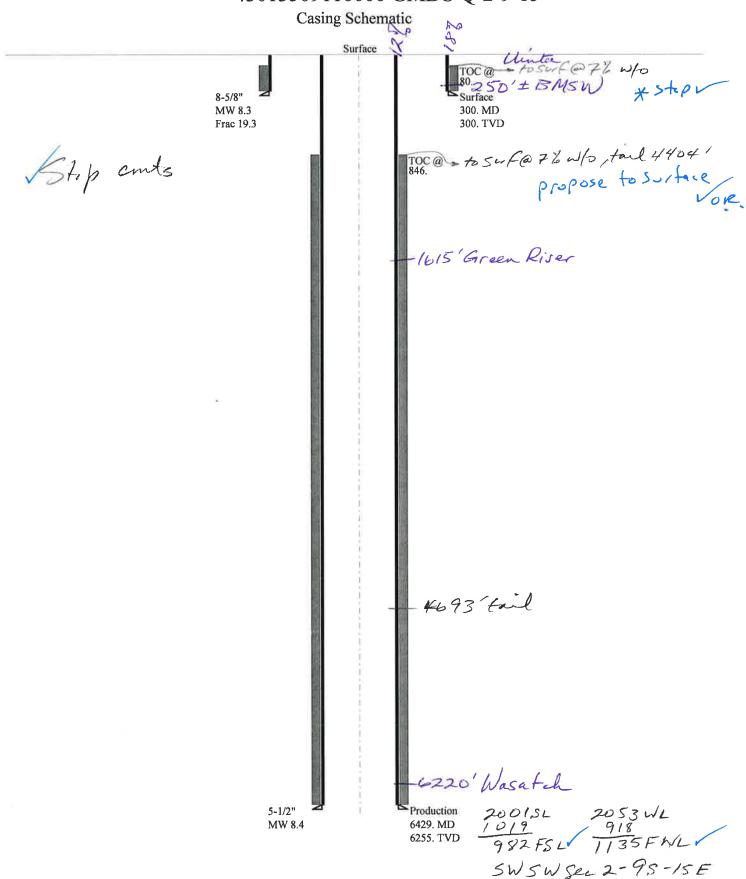
**RECEIVED:** September 20, 2011

## BOPE REVIEW NEWFIELD PRODUCTION COMPANY GMBU Q-2-9-15 43013509110000

Well Name		NEWFIELD PI	ROD	DUCTION CO	DМ	IPANY GMBU (	Q-2-9-15 43	3013			
String	Surf	Prod									
Casing Size(")	8.625	5.	.500	Ī			=				
Setting Depth (TVD)	300	62	255	Î			₹				
Previous Shoe Setting Dept	0	30	00	Ī			₹				
Max Mud Weight (ppg)		8.3	8.		ľ		<u>.                                    </u>	=			
BOPE Proposed (psi)		500	₩	000	ľ			=			
Casing Internal Yield (psi)			╬		<u>   </u>		<u> </u>	#			
Operators Max Anticipate		2950	╫	810	H		<u> </u>	#			
Operators Max Anticipates	u i ressure (psi)	2708	8.	.3	IJ.		<u> </u>				
Calculations	Sur	f String				8.625	5 "				
Max BHP (psi)		.052*Settii	ing I	Depth*MV	V=	129	j				
							ВОРЕ	Ade	quate For Drilling And Setting Casing at Depth?		
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ting Depth	1)=	93	YES		air drill		
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Sett	ting Depth	1)=	63	YES		OK		
							*Can I	*Can Full Expected Pressure Be Held At Previous Sho			
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us S	Shoe Depth	1)=	63	NO		ОК		
Required Casing/BOPE Te	est Pressure=					300	psi	psi			
*Max Pressure Allowed @	Previous Casing Shoe=					0	psi *	psi *Assumes 1psi/ft frac gradient			
Calculations	Proc	d String				5.500	) "				
Max BHP (psi)		.052*Settii	ing I	Depth*MV	V=	2732	]				
							BOPE	Ade	equate For Drilling And Setting Casing at Depth?		
MASP (Gas) (psi)		x BHP-(0.12*			_	1001	YES				
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Sett	ting Depth	ı)=	1356	YES		OK		
						-	*Can I	Full	Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe		epth - Previou	us S	Shoe Depth	1)=	1422	NO		Reasonable for area		
Required Casing/BOPE Te	est Pressure=					2000	psi				
*Max Pressure Allowed @	Previous Casing Shoe=					300	psi *	Ass	umes 1psi/ft frac gradient		
Calculations	<u> </u>	tring			_		111				
Max BHP (psi)	String .052*Setting Depth*MW=					1	_				
(psi)		.032 Setti		Bepui ivi v	_	<u>  </u>	ROPE	Ade	equate For Drilling And Setting Casing at Depth?		
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ting Denth	n)=		NO	Tuc	Against 1 of 21 ming 1 in a Secting Cusing at 2 option		
MASP (Gas/Mud) (psi)		x BHP-(0.22*			_	<u> </u>					
Mist (Gas/Maa) (psi)	17147	1 1 (0.22		тив Вери	_	<u>  </u>	NO *Can I	7nH	Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us S	Shoe Denth	1)=		NO				
Required Casing/BOPE To		1		F.W.	_	<u>                                     </u>	psi		1		
					<u> </u>	1	Δοσ	umes 1psi/ft frac gradient			
*Max Pressure Allowed @ Previous Casing Shoe=				_	<u>  [                                   </u>	l psi	A33	anies 1psi/it frac gradient			
Calculations	S	tring					"				
Max BHP (psi)		.052*Settii	ing I	Depth*MV	V=						
							ВОРЕ	Ade	equate For Drilling And Setting Casing at Depth?		
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Sett	ting Depth	1)=		NO				
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Sett	ting Depth	1)=		NO				
							*Can I	Full	Expected Pressure Be Held At Previous Shoe?		
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us S	Shoe Depth	1)=		NO				
Required Casing/BOPE Te	est Pressure=						psi				
tequired cusing 2 of 2 reservessure					1.	1					

\*Max Pressure Allowed @ Previous Casing Shoe= psi \*Assumes 1psi/ft frac gradient

# 43013509110000 GMBU Q-2-9-15



Well name:

43013509110000 GMBU Q-2-9-15

Operator:

**NEWFIELD PRODUCTION COMPANY** 

String type:

Surface

Project ID: 43-013-50911

Location:

**DUCHESNE** COUNTY

> Minimum design factors: **Environment:**

> > 1.125

Design parameters: Collapse Collapse:

8.330 ppg Mud weight:

Design is based on evacuated pipe.

H2S considered?

Surface temperature:

74 °F 78 °F

No

Bottom hole temperature: Temperature gradient:

1.40 °F/100ft

Minimum section length:

100 ft

Burst:

Design factor

Design factor

1.00

Cement top:

80 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: 264 psi

Calculated BHP

No backup mud specified.

0.120 psi/ft

300 psi

Premium:

Body yield:

Tension:

8 Round STC: 1.80 (J) 1.70 (J) 8 Round LTC: Buttress: 1.60 (J)

1.50 (J) 1.50 (B)

Tension is based on air weight. 262 ft

Neutral point:

Re subsequent strings:

Non-directional string.

Next setting depth: Next mud weight:

8.400 ppg Next setting BHP: 2,730 psi 19.250 ppg

Fracture mud wt: Fracture depth: Injection pressure:

300 ft 300 psi

6,255 ft

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	1544
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
•	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	130	1370	10.557	300	2950	9.83	7.2	244	33.90 J

Prepared by:

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: August 18,2011 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 300 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

43013509110000 GMBU Q-2-9-15

Operator:

**NEWFIELD PRODUCTION COMPANY** 

String type:

Production

Project ID: 43-013-50911

Location:

COUNTY **DUCHESNE** 

**Environment:** 

Design parameters:

**Collapse** 

8.400 ppg Mud weight: Design is based on evacuated pipe.

Minimum design factors: Collapse:

Design factor

H2S considered? Surface temperature: No 74 °F

Bottom hole temperature:

162 °F

Temperature gradient:

1.40 °F/100ft

Minimum section length:

100 ft

Burst:

Design factor

1.00 Cement top: 846 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

1,353 psi 0.220 psi/ft

2,730 psi

Tension:

8 Round STC: 8 Round LTC: Buttress:

Premium: Body yield:

1.60 (J) 1.50 (J) 1.60 (B) Directional Info - Build & Hold

Kick-off point 600 ft Departure at shoe: 1372 ft Maximum dogleg: 1.5 °/100ft

Inclination at shoe:

14.9°

Tension is based on air weight.

Neutral point:

5,606 ft

1.80 (J)

1.80 (J)

1.125

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6429	5.5	15.50	J-55	LT&C	6255	6429	4.825	22701
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2730	4040	1.480	2730	`4810	1.76	97	217	2.24 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 801 538-5357 FAX: 801-359-3940

Date: August 18,2011 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 6255 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

# **ON-SITE PREDRILL EVALUATION**

# Utah Division of Oil, Gas and Mining

**Operator** NEWFIELD PRODUCTION COMPANY

Well Name GMBU Q-2-9-15

API Number 43013509110000 APD No 4291 Field/Unit MONUMENT BUTTE

Location: 1/4,1/4 NESW Sec 2 Tw 9.0S Rng 15.0E 2001 FSL 2053 FWL

GPS Coord (UTM) Surface Owner

### **Participants**

M. Jones (UDOGM), T. Eaton (Newfield), J. Davis (SITLA), A. Hansen (DWR).

# Regional/Local Setting & Topography

This location is proposed approximately 14 road miles southwest of Myton, Utah. The topography is rolling hills and dry wash drainages. Proposed bottom hole is southwest of wellhead. This well is proposed on an existing well pad. There is approximately 20' of additional pad disturbance planned on the east side. The old pit area will be re-disturbed for the new pit.

#### Surface Use Plan

**Current Surface Use** 

Grazing

Wildlfe Habitat

New Road Miles Well Pad Src Const Material Surface Formation

0 Width 110 Length 307 Onsite

**Ancillary Facilities** 

#### **Waste Management Plan Adequate?**

#### **Environmental Parameters**

Affected Floodplains and/or Wetlands N

Flora / Fauna

existing well pad.

**Soil Type and Characteristics** 

gravely clay.

**Erosion Issues** N

**Sedimentation Issues** N

Site Stability Issues N

**Drainage Diverson Required?** N

Berm Required? Y

Berm location to prevent fluids from entering and/or leaving the pad.

**Erosion Sedimentation Control Required?** N

9/27/2011 Page 1

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? N Cultural Resources? N

# **Reserve Pit**

Site-Specific Factors	Site Ra		
Distance to Groundwater (feet)	>200	0	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)		20	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
<b>Annual Precipitation (inches)</b>	10 to 20	5	
Affected Populations			
<b>Presence Nearby Utility Conduits</b>	Not Present	0	
	Final Score	40	1 Sensitivity Level

# **Characteristics / Requirements**

Dugout earthen (80' x 40' x 8') excluded from pad dimensions.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

# **Other Observations / Comments**

Mark Jones 8/10/2011 **Evaluator Date / Time** 

9/27/2011 Page 2

# **Application for Permit to Drill Statement of Basis**

9/27/2011 Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	<b>Surf Owner</b>	<b>CBM</b>			
4291	43013509110000	SITLA	OW	S	No			
Operator	NEWFIELD PRODUCTION COM	MPANY	Surface Owner-APD					
Well Name	GMBU Q-2-9-15		Unit	GMBU (GRR	V)			
Field	MONUMENT BUTTE		Type of Work	DRILL				
Location	NESW 2 9S 15E S 2001	FSL 2053 FV	VL GPS Coord (UTM)	568170E 443	4300N			

#### **Geologic Statement of Basis**

Newfield proposes to set 300 feet of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 250'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 2. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect useable sources of underground water.

Brad Hill 8/16/2011
APD Evaluator Date / Time

#### **Surface Statement of Basis**

This location is proposed approximately 14 road miles southwest of Myton, Utah. The topography is rolling hills and dry wash drainages. Proposed bottom hole is southwest of wellhead. This well is proposed on an existing well pad. There is approximately 20' of additional pad disturbance planned on the east side. The old pit area will be re-disturbed for the new pit.

Mark Jones 8/10/2011
Onsite Evaluator Date / Time

#### Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

**RECEIVED:** September 27, 2011

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/29/2011 **API NO. ASSIGNED:** 43013509110000

WELL NAME: GMBU Q-2-9-15

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: NESW 02 090S 150E **Permit Tech Review:** 

> SURFACE: 2001 FSL 2053 FWL **Engineering Review:**

> **BOTTOM:** 0994 FSL 1106 FWL Geology Review:

**COUNTY: DUCHESNE** 

**LATITUDE: 40.05809 LONGITUDE:** -110.20073 UTM SURF EASTINGS: 568170.00 **NORTHINGS:** 4434300.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 3 - State

**LEASE NUMBER: ML-43538** PROPOSED PRODUCING FORMATION(S): GREEN RIVER **SURFACE OWNER: 3 - State COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** 

✓ PLAT R649-2-3.

Unit: GMBU (GRRV) Bond: STATE/FEE - B001834

**Potash** R649-3-2. General

Oil Shale 190-5

**Oil Shale 190-3** R649-3-3. Exception

**Drilling Unit** Oil Shale 190-13

Board Cause No: Cause 213-11 Water Permit: 437478

**Effective Date:** 11/30/2009 **RDCC Review:** 

Siting: Suspends General Siting **Fee Surface Agreement** 

**Intent to Commingle** ■ R649-3-11. Directional Drill

**Commingling Approved** 

**Comments:** Presite Completed

Stipulations:

5 - Statement of Basis - bhill 8 - Cement to Surface -- 2 strings - hmacdonald 15 - Directional - dmason 27 - Other - bhill

API Well No: 43013509110000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# Permit To Drill

\*\*\*\*\*\*

**Well Name:** GMBU Q-2-9-15 **API Well Number:** 43013509110000

**Lease Number:** ML-43538 **Surface Owner:** STATE **Approval Date:** 9/27/2011

#### **Issued to:**

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

Cement volumes for the 8 5/8" and 5 1/2" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

### **Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet

API Well No: 43013509110000

• Plug and abandonment of the well – contact Dustin Doucet

# **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

#### **Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas

# BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross #29 Submitted By Mitch Benson Phone Number 435-823-5885 Well Name/Number GMBU Q-2-9-15 Qtr/Qtr NE/SW Section 2 Township 9S Range 15E Lease Serial Number ML-43538 API Number 43-013-50911 Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string. Date/Time  $\underline{11/29/11}$   $\underline{9:00}$  AM  $\boxtimes$  PM  $\square$ Casing – Please report time casing run starts, not cementing times. Surface Casing **Intermediate Casing Production Casing** Liner Other Date/Time  $\underline{11/29/11}$   $\underline{2:00}$  AM  $\square$  PM  $\bowtie$ **BOPE** Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other Date/Time \_\_\_\_\_ AM PM Remarks \_\_\_\_\_

### STATE OF UTAH

	5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-43538			
SUNDR	Y NOTICES AND REPO	ORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for proposals to d wells, or to drill horizon	rill new wells, significantly deepen existing wells be tal laterals. Use APPLICATION FOR PERMIT TO	low current bottom-hole depth, reenter plug DRILL form for such proposals.	ged 7. UNIT or CA AGREEMENT NAME: GMBU	
1. TYPE OF WELL: OIL WELL			8. WELL NAME and NUMBER: GMBU Q-2-9-15	
2. NAME OF OPERATOR:			9. API NUMBER:	
NEWFIELD PRODUCTION COL	MPANY		4301350911	
3. ADDRESS OF OPERATOR:		PHONE NUMBER	10. FIELD AND POOL, OR WILDCAT:	
Route 3 Box 3630	CITY Myton STATE UT	ZIP 84052 435.646.3721	GREATER MB UNIT	
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 200	I FSh 2053 FWL		COUNTY: DUCHESNE	
OTR/OTR, SECTION, TOWNSHIP, RANGE	E. MERIDIAN: , 2, T9S, R15E		STATE: UT	
CHECK APPRO	PRIATE BOXES TO INDICATE	E NATURE OF NOTICE, R	EPORT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION	J	
_	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION	
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL	
	CASING REPAIR	NEW CONSTRUCTION	TEMPORARITLY ABANDON	
Approximate date work will	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR	
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLAIR	
	l mart /	rand rang	WATER DISPOSAL	
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK		
Date of Work Completion:	CHANGE WELL STATUS	PRODUCTION (START/STOP)	WATER SHUT-OFF	
out of work compression	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER: - Spud Notice	
12/07/2011	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMA	TION	
On 11/29/11 MIRU Ross #	nt with 160 sks of class "G" w/ 2% Ca	of 12 1/4" hole with air mist. TIF	HW/ 7 Jt's 8 5/8" J-55 24# csgn. Set @	
NAME (PLEASE PRINT) Branden Amo	ld	TITLE		
SIGNATURE & J.F.	. •	DATE 12/07/2011		

(This space for State use only)

RECEIVED
DEC 1 3 2011

# **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

			8 5/8"	CASING SET AT		301.72	(an		
I AST CASING	14	SET AT	9		OPERATO	R ·	Newfield I	Exploration	Company
LAST CASING DATUM	13	- OLI AI			WELL				
			13	-			Monumen	t Butte	
DATUM TO CUT	DENHEAD	FLANGE	13	•	CONTRAC				
TD DRILLER	310	LOGG	ER						
HOLE SIZE				· <del>·········</del>					
11000 0120				• .					
LOG OF CASING	3 STRING:		·						
PIECES	OD	ITEM - M	AKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		wellhead						Α	1.42
7	8 5/8"	casing (sho	pe jt 41.25)		24	J-55	STC	Α	288.4
1	8 5/8"	Guide Sho						Α	0.9
									ļ
				· · · · · · · · · · · · · ·					
									-
					ļ				
			····	,					200.70
CASING INVENT			FEET	JTS	TOTAL LEI				290.72
TOTAL LENGTH		G	290.72	7	LESS CUT			0	13
LESS NON CSG			2.32		4		UT OFF CS	G	301.72
PLUS FULL JTS			0		CASING S	ET DEPTH			301.72
			288.4	7	Lagura	.חר			
TOTAL CSG. DE		IRDS)			] } COMPA	KE			
7			10.00 514	44/00/0044	0000 015	O TUDU I	ОВ	Voc	
BEGIN RUN CSC	G	Spud	12:00 PM 6:00 AM		Bbis CMT				
				11/29/2011	RECIPRO				
BEGIN CIRC	\4T		1:03 PM	12/4/2011 12/4/2011	IKECIPKO	シベリモリ トル	110		
BEGIN PUMP CI			1:16 PM		I BUMPED F	DI LIG TO	355		
BEGIN DSPL. CI	IVI I	<del></del>	1:28 PM	12/4/2011	POME FOL	- 200 10			<del></del>
PLUG DOWN			1:33 PM	12/4/2011					

CEMENT USED	<del></del>	CEMENT CC	MPANY-	Baker Hughes
STAGE	# SX	CEMENT TY	PE & ADDITIVE	S
1	160	Class "G"+2%CaCl Mixed@ 15.8ppg W/1.17	yield returned 9bb	ols to pit
<u></u>			<del> </del>	
		<u> </u>		
	<u> </u>			
CENTRALIZER	SCRATC	HER PLACEMENT		SHOW MAKE & SPACING
Middle of first,	op of seco	ond and third for a total of three.		
COMPANY REP	RESENTA	FIVE Branden Arnold		DATE 12/7/2011

OPERATOR ACCT. NO.

N2695

ADDRESS: RT. 3 BOX 3630 MYTON, UT 84052

ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION CO SC TP RG COUNTY				COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17 <del>400</del>	<del>4301350699</del>	GMBU-U-7-9-16	NWNW	-7-			DUCHESNE	11/21/2011	on
WELL 1 CO	DMMENTS:			0 11/1	A : 1			······································			
		P	processeo	l 1/30/11 Dup	lecat	e					
ACTION	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION  QQ SC TP RG COUNTY					SPUD DATE	EFFECTIVE DATE
В	99999	17400	<i>50703</i> <b>43013<del>50700</del></b>	GMBU G-8-9-16	NWNW	8	98		DUCHESNE	12/5/2011	12/16/11
	GREN BAL=SENW -										
ACTION	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME		WE SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE
В	99999	<i>V</i> 17400	4301350907	GMBU L-2-9-15	SWNE	2	98		DUCHESNE		12/16/11
	GRRV BHL-NESE -										
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO	API NUMBER	WELL NAME	00	WE SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350728	GMBU W-6-9-16	NENW	7	98	16E	DUCHESNE	11/30/2011	12/16/11
	GRRN			BHL = Sec	6 5	ilus	5 <i>E</i>			المراجع	
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350911	GMBU Q-2-9-15	NESW		98		DUCHESNE		13/16/11
	GRRV			BAL= Sws	SW		<del></del>				
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	- QQ	sc	ELL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	√ 17400	4301350910	GMBU N-2-9-15	NESW		98		DUCHESNE		13/16/11
	GRRV BHL=SWNW										
ACTION C	ODES (See instructions on bac	k of form)						***************************************			

- A 1 new entity for new well (single well only)
- B r well to existing entity (group or unit well)
- C from one existing entity to another existing entity
- D well from one existing entity to a new entity
- E ther (explain in comments section)

RECEIVED

DEC 1 2 2011

Production Clerk

Jentri Park

12/08/11

NOTE: Use COMMENT section to explain why each Action Code was selected

Sundry Number: 25005 API Well Number: 43013509110000

	STATE OF UTAH		FORM 9		
ι	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: ML-43538		
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)		
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU Q-2-9-15		
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	9. API NUMBER: 43013509110000				
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,	PHONE NUMBER: 5 Ext	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2001 FSL 2053 FWL			COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: D2 Township: 09.0S Range: 15.0E Merio	dian: S	STATE: UTAH		
11. CHECK	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOI	RT, OR OTHER DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			
	ACIDIZE	ALTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME		
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK		
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
Date of Spud:	REPERFORATE CURRENT FORMATION	REPERFORATE CURRENT FORMATION SIDETRACK TO REPAIR WELL			
	TUBING REPAIR				
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION		
3/15/2012	WILDCAT WELL DETERMINATION	OTUER	OTHER:		
		U OTHER	<u> </u>		
	completed operations. Clearly show was placed on production on hours.		Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 08, 2012		
NAME (PLEASE PRINT) Jennifer Peatross	<b>PHONE NUMB</b> 435 646-4885	ER TITLE Production Technician			
SIGNATURE N/A		<b>DATE</b> 4/23/2012			



### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

<b>-</b>					
WELL COMP	I ETION OD	DECOMDI	ETION	DEDODT	
VVIII (.(.))VIP	1 - 111 111 118	RELIMBE		REFURI	

	WE	ELL CC	MPLETIC	1	5. Lease Serial No. ML-43538										
la. Type of V	Well Completion:	✓ Oil V ✓ New Othe	Well 🗖	Gas Well Work Over	Dry Deepen D	Other Plug Back	☐ Diff	Resvr.,			<b>NA</b> 7. U	Indian, Allottee or			
2. Name of	Operator		COMPANY				<del></del>				8. L	BU (GRRV) ease Name and Wel	l No.		
NEWFIELI  3. Address	DEXPLOF	RATION	COMPANY			3a.	. Phone l	No. (includ	de area co	de)		BU Q-2-9-15 FI Well No.			
			000 DENVER,		dance with Federal	(4	35) 646				43-0	013-50911 Field and Pool or Ex	rnloretory.		
4. Location	oi well (ke	рогі юсаі	ion cieariy ai	ra in accore	iance wiin reaerai	requiremen	us) ·				МО	NUMENT BUTTE			
At surfac	<sup>e</sup> 2001' FS	SL & 205	3' FWL (NE	/SW) SEC	C. 2, T9S, R15E	(ML-4353	8)				11.	Sec., T., R., M., on I Survey or Area SEC	Block and :. 2, T9S, R15E		
At top pro	d. interval r	eported be	low 1343' I	FSL & 145	66' FWL (NE/SW	/) SEC. 2,	T9S, R1	5E (ML-	43538)			County or Parish	13. State		
At total de	<sub>epth</sub> 967' F	SL & 11	33' FWL (S	W/SW) SI	EC. 2, T9S, R15	E (ML-435	538) B	AHL 6	y HE	M		CHESNE	UT		
14. Date Sp 11/29/201	udded			Γ.D. Reache		16. <u>D</u>		oleted 03		2		Elevations (DF, RK 9' GL 6129' KB	B, RT, GL)*		
18. Total De	epth: MD		02/12/2		ug Back T.D.: M	1D 6400'				Bridge Plu	ıg Set:	MD			
2.1 Type E	TVI lectric & Oth	O 6254' er Mechan	ical Logs Run	(Submit co	ny of each)	VD 627	<u>ue</u>	2:	2. Was w	vell cored?	<b>∠</b> N	TVD To ☐ Yes (Subm	it analysis)		
DUAL INC	GRD, SP	, COMP.	DENSITY	COMP. N	EUTRON, GR, C	ALIPER, C	МТ ВО		Was D	OST run? ional Surve	<b>✓</b> N	lo 🔲 Yes (Subm	it report)		
23. Casing	and Liner R	ecord (Re	port all strin	gs set in we	11)							Tes (Suom	Г		
Hole Size	Size/Gra	ide Wi	. (#/ft.)	Гор (МО)	Bottom (MD)	Stage Ce Dep			f Sks. & f Cement		ry Vol. BL)	Cement Top*	Amount Pulled		
12-1/4"	8-5/8" J-		<del>`                                    </del>		299'				ASS "G"						
7-7/8"	5-1/2" J-	55 15.	5# 0		6379'			<del></del>	IMLITE			40'			
								4/5 50/	50 POZ						
	<u> </u>														
24. Tubing		Set (MD)	Packer De	oth (MD)	Size	Depth Se	t (MD)	Packer D	epth (MD)	) s	ize	Depth Set (MD)	Packer Depth (MD)		
2-7/8"	EOT@	6275'	TA @ 617						- F (·· · · - /						
25. Produci	ng Intervals Formation			Тор	Bottom		rforation forated In			Size	No.	Holes	Perf. Status		
A) Green		1	4409'	100	6180'	5884-61			.36		21		2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
B)						4409-55	76'		.34	<b>!</b> "	51				
C) D)															
	racture Trea	atment Ce	ment Squeez	e etc											
	Depth Inter							Amount ar							
4409-618	<u>'</u>		Frac v	v/ 268029	# 20/40 white sa	and and 27	51 bbls	Lightning	g 17 fluid	l, in 5 sta	ges.				
28. Product Date First	ion - Interva	al A Hours	Test	Oil	Gas V	Vater	Oil Gra	vity	Gas	Dr	oduction N	1ethod			
Produced	Test Date	Tested	Production			BBL	Corr. A		Gravity			3/4" x 24' RHAC	Pump		
3/15/12	3/25/12	24	<b>→</b>	1	1	84									
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL		Vater BBL	Gas/Oil Ratio		Well St PROI	tatus DUCING	NG				
	ction - Interv	val B													
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	1	Vater BBL	Oil Gra Corr. A		Gas Gravity		oduction N	Method			
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL		Vater BBL	Gas/Oil Ratio		Well S	tatus		RECEIN	/ED		
*(See inst	ructions and	spaces fo	r additional d	ata on page	: 2)	<del></del>						JUN 2 1	2012		

201: D.: 4	Latina Ta	10									
	luction - Inte	Hours	Test	Oil	Gas	Water	Oil G	ravity	Gas	Production Method	
Produced	l cst Bate	Tested	Production	BBL	MCF	BBL	Corr.		Gravity	roduction reguled	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/C Ratio		Well Status		
	uction - Inte			Tota	1		- lau a			L	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil G Corr.		Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/C Ratio		Well Status		
29. Dispo	sition of Ga	s (Solid, us	sed for fuel, ve	ented, etc.,			L				
USED FOR	RFUEL										
30. Sumr	nary of Poro	us Zones	(Include Aqu	ifers):					31. Format	ion (Log) Markers	
	ing depth int					intervals and al ing and shut-in			GEOLOG	SICAL MARKERS	
For	mation	Тор	Bottom		Das	Descriptions, Contents, etc.				Name	Top
100	mation	Top	Bottom		Descriptions, Contents, etc.					Name	Meas. Depth
GREEN RI	VER	4409'	6180'						GARDEN GU GARDEN GU	JLCH MARKER JLCH 1	3824' 4063'
									GARDEN GU POINT 3 MA		4179' 4444'
									X MRKR Y MRKR		4721' 4755'
									DOUGLAS O BI-CARBON	CREEK MRKR ATE	4869' 5124'
									B LIMESTOI CASTLE PE		5235' 5802'
									BASAL CAR WASATCH	BONATE	6245' 6378'
32. Addit	tional remar	ks (include	plugging pro	ocedure):							
33. Indic	ate which ite	ems have b	een attached	by placing	a check in th	e appropriate be	oxes:				
		_	s (1 full set req g and cement v	•		Geologic Repo		☐ DST Rep ☐ Other:	port	☑ Directional Survey	
34. I here	eby certify th	nat the fore	going and att	ached info	rmation is co	mplete and corr	rect as dete	ermined from	all available	records (see attached instructions)	k
			ennifer Peat			-			Technician		
	Signature	XU	atnu	2				04/24/2012	2		
						it a crime for a			and willfully to	o make to any department or agenc	y of the United States any
(Continue	ed on page 3	)									(Form 3160-4, page 2)



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 2 T9, R15 Q-2-9-15

Wellbore #1

**Design: Actual** 

# **Standard Survey Report**

18 February, 2012





Map Zone:

### **Payzone Directional**

Survey Report

TVD Reference:

MD Reference:



Company: **NEWFIELD EXPLORATION** Project: USGS Myton SW (UT)

Site: SECTION 2 T9, R15

Well: Q-2-9-15 Wellbore: Wellbore #1 Actual Design:

Local Co-ordinate Reference:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Capstar 329) Q-2-9-15 @ 6041.0ft (Capstar 329)

North Reference:

Survey Calculation Method: Minimum Curvature Database: EDM 2003.21 Single User Db

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA Project

US State Plane 1983 Map System: Geo Datum:

North American Datum 1983

Utah Central Zone

System Datum:

Mean Sea Level

SECTION 2 T9, R15 Site

Site Position: Northing: 7,191,145.41 ft 40° 3' 15.350 N 110° 11' 49.770 W 2,005,088.49 ft From: Lat/Long Easting: Longitude:

Slot Radius: Grid Convergence: 0.83° 0.0 ft **Position Uncertainty:** 

Well Q-2-9-15, SHL LAT: 40 03 29.37 LONG: -110 12 05.83

+N/-S 0.0 ft Latitude: 40° 3' 29.370 N **Well Position** Northing: 7.192.545.66 ft Easting: 110° 12' 5.830 W 2,003,819.30 ft Longitude: +E/-W 0.0 ft 6.029.0 ft

**Ground Level:** 0.0 ft Wellhead Elevation: 6,041.0 ft **Position Uncertainty** 

Welfbore Well	bore #1		en a nestantamente de la composition d La composition de la	is a religion in the second	n ka sa gadan ang mantan salisa.
Magnetics N	flodel Name	Sample Date	Declination (°)	Dip Angle F (°)	ield Strength (nT)
	IGRF2010	6/20/2011	11.37	65.78	52,252

Design **Audit Notes:** ACTUAL Tie On Depth: 0.0 Version: 1.0 Phase: Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.0 0.0 0.0 222.02

Survey Program Date 2/18/2012 From To (ft) Survey (Wellbore) **Tool Name** Description MWD MWD - Standard 6,428.7 Survey #1 (Wellbore #1) 348.0

Survey								The state of the s	
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth. (ft)	4+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ff)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
348.0	0.20	77.30	348.0	0.1	0.6	-0.5	0.06	0.06	0.00
378.0	0.30	164.90	378.0	0.1	0.7	-0.5	1.18	0.33	292.00
409.0	0.50	210.80	409.0	-0.1	0.6	-0.3	1.17	0.65	148.06
439.0	0.50	215.60	439.0	-0.3	0.5	-0.1	0.14	0.00	16.00
470.0	0.60	220.90	470.0	-0.6	0.3	0.2	0.36	0.32	17.10
500.0	0.80	226.90	500.0	-0.8	0.0	0.6	0.71	0.67	20.00
531.0	1.00	246.70	531.0	-1.1	-0.4	1.1	1.18	0.65	63.87
561.0	1.10	230.30	561.0	-1.4	-0.8	1.6	1.05	0.33	-54.67
592.0	1.70	233.50	592.0	<b>-</b> 1.8	-1.4	2.3	1.95	1.94	10.32
622.0	2.00	244.40	622.0	-2.3	-2.3	3.3	1.54	1.00	36.33
653.0	2.70	238.40	652.9	-3.0	-3.4	4.5	2.39	2.26	-19.35
683.0	3.20	234.30	682.9	-3.8	<u>-4.7</u>	5.9	1.81	1.67	-13.67



# **Payzone Directional**

Survey Report



Company: Project: NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 2 T9, R15

 Site:
 SECTION 2

 Well:
 Q-2-9-15

 Wellbore:
 Wellbore #1

Wellbore: Wellbo Design: Actual Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Capstar 329)

Q-2-9-15 @ 6041.0ft (Capstar 329)

Minimum Curvature

EDM 2003.21 Single User Db

	engladus (priestrukkus vierteirus) ekonomienteirus (kierriks). Errus Pedrous erkenteirus (kierriks)	na de la composition della com				Participation of the contract	nakatenak (a. 1500), aktor teknologi. Kanal makanakan ketanak di Aktor teknologi.		ening i mangang dan bermangan di Kabupatèn Kabupatèn Mangang dan bermangan dan
urvey				ar market kilos i zakoż z doktoka	Management of Management and Company	Restricted to the State of Sta	hant adversariable desirement	Bitting Bitter and State State Services	
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth						Section	Rate	Rate	Rate
	inclination	Azimuth	Depth	+N/-S	+E/-W		2 on a second of the second of the second	12 To 20 SEC SECTION TO BE TO SECURE A PROPERTY OF THE SECURE AS A PROPERTY OF THE SEC	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
714.0	3.30	236.20	713.8	-4.8	-6.1	7.7	0.47	0.32	6.13
744.0	4.00	237.30	743.8	-5.9	-7.7	9.5	2.34	2.33	3.67
775.0	4.50	232.90	774.7	-7.2	-9.6	11.7	1.92	1.61	-14.19
806.0	5.40	233.10	805.6	-8.8	-11.7	14.4	2.90	2.90	0.65
836.0	6.20	233.20	835.4	-10.6	-14.1	17.3	2.67	2.67	0.33
880.0	6.80	231.40	879.1	-13.7	-18.1	22.2	1.44	1.36	-4.09
924.0	7.20	229.20	922.8	-17.1	-22.2	27.5	1.09	0.91	-5.00
968.0	7.60	224.50	966.5	-21.0	-26.3	33.2	1.65	0.91	-10.68
	8.10			-21.0 -25.2	-30.4	39.1	1.21	1.16	-2.33
1,011.0		223.50	1,009.0						
1,055.0	8.50	222.10	1,052.6	-29.8	-34.7	45.4	1.02	0.91	-3.18
1,099.0	9.10	222.00	1,096.1	-34.8	-39.2	52.1	1.36	1.36	-0.23
1,143.0	9.50	222.50	1,139.5	-40.1	-44.0	59.3	0.93	0.91	1.14
1,187.0	9.70	221.50	1,182.9	-45.6	-48.9	66.6	0.59	0.45	-2.27
1,231.0	10.20	222.90	1,226.2	-51.2	-54.0	74.2	1.26	1.14	3.18
1,274.0	11.00	225.40	1,268.5	-56.9	-59.5	82.1	2.15	1.86	5.81
1,318.0	11.30	226.90	1,311.6	-62.7	-65.7	90.6	0.95	0.68	3.41
1,362.0	11.90	229.80	1,354.7	-68.6	-72.3	99.4	1.90	1.36	6.59
1,406.0	12.40	228.90	1,397.8	-74.7	-79.3	108.6	1.22	1.14	-2.05
1,449.0	12.90	228.20	1,439.7	-80.9	-86.4	117.9	1.22	1.16	-1.63
1,493.0	13.30	228.20	1,482.6	-87.5	-93.8	127.8	0.91	0.91	0.00
1,537.0	13.30	228.60	1,525.4	-94.3	-101.4	137.9	0.21	0.00	0.91
1,581.0	13.30	226.70	1,568.2	-101.1	-108.9	148.0	0.99	0.00	-4.32
4.005.0	42.00	220 00	4 044 0	400.0	446.3	450.2	4.44	4.26	-1.59
1,625.0	13.90	226.00	1,611.0	-108.2	-116.3	158.3	1.41	1.36	
1,669.0	13.80	225.00	1,653.7	-115.6	-123.9	168.8	0.59	-0.23	-2.27
1,712.0	13.70	222.80	1,695.5	-123.0	-130.9	179.0	1.24	-0.23	-5.12
1,756.0	13.50	221.50	1,738.2	-130.6	-137.9	189.3	0.83	-0.45	-2.95
1,800.0	13.40	221.50	1,781.0	-138.3	-144.7	199.6	0.23	-0.23	0.00
1,844.0	13.70	223.80	1,823.8	-145.9	-151.6	209.9	1.40	0.68	5.23
1,888.0	14.10	223.80	1,866.5	-153.5	-159.0	220.5	0.91	0.91	0.00
1,931.0	14.40	222.80	1,908.2	-161.2	-166.2	231.0	0.90	0.70	-2.33
1,975.0	13.70	222.80	1,950.9	-169.0	-173.5	241.7	1.59	-1.59	0.00
2,019.0	13.40	219.30	1,993.7	-176.8	-180.3	252.0	1.98	-0.68	-7.95
2,019.0	13.40	218.30	1,333.1	-170.0					
2,063.0	13.80	222.80	2,036.4	-184.6	-187.0	262.4	2.08	0.91	7.95
2,107.0	14.40	221.30	2,079.1	-192.6	-194.2	273.1	1.60	1.36	-3.41
2,150.0	14.40	220.90	2,120.7	-200.6	-201.3	283.8	0.23	0.00	-0.93
2,194.0	14.20	219.20	2,163.4	-208.9	-208.2	294.6	1.06	-0.45	-3.86
2,238.0	15.10	218.40	2,205.9	-217.6	-215.2	305.7	2.10	2.05	-1.82
2,282.0	16.00	219.40	2,248.3	-226.8	-222.6	317.5	2.13	2.05	2.27
2,326.0	16.50	220.50	2,290.6	-236.2	-230.5	329.8	1.33	1.14	2.50
2,370.0	17.00	220.70	2,332.7	-245.9	-238.8	342.5	1.14	1.14	0.45
2,413.0	17.10	221.70	2,373.8	-255.4	-247.1	355.1	0.72	0.23	2.33
2,457.0	16.60	221.50	2,415.9	-264.9	-255.6	367.9	1.14	-1.14	-0.45
2,501.0	16.60	222.40	2,458.1	-274.2	-264.0	380.4	0.58	0.00	2.05
2,545.0	16.60	221.00	2,500.3	-283.6	-272.3	393.0	0.91	0.00	-3.18
2,589.0	16.30	221.80	2,542.5	-293.0	-272.3	405.5	0.85	-0.68	1.82
			2,542.5 2,583.8		-288.4	417.3	1.36	-1.16	-2.56
2,632.0	15.80	220.70		-301.9				-0.45	-2.27
2,676.0	15.60	219.70	2,626.1	-311.0	-296.1	429.2	0.76	-U. <del>4</del> 3	-2.21
2,720.0	15.90	218.80	2,668.5	-320.2	-303.6	441.2	0.88	0.68	-2.05
2,764.0	15.90	218.60	2,710.8	-329.7	-311.2	453.2	0.12	0.00	-0.45
2,807.0	15.30	218.80	2,752.2	-338.7	-318.4	464.7	1.40	-1.40	0.47
2,851.0	15.00	217.70	2,794.7	-347.7	-325.5	476.2	0.94	-0.68	-2.50
2,895.0	14.60	218.90	2,837.2	-356.5	-332.5	487.4	1.15	-0.91	2.73
2,939.0	15.35	222.00	2,879.7	-365.2	-339.9	498.8	2.49	1.70	7.05
2,983.0	16.30	223.60	2,922.1	-374.0	-348.0	510.8	2.38	2.16	3.64



# **Payzone Directional**

Survey Report



Company: NEWFIELD EXPLORATION

Project: USGS Myton SW (UT)

Site: SECTION 2 T9, R15

Well: Q-2-9-15
Wellbore: Wellbore #1
Design: Actual

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Capstar 329) Q-2-9-15 @ 6041.0ft (Capstar 329)

True

Minimum Curvature

EDM 2003.21 Single User Db

irvey							The state of the s		
		Trial Control						200	
Measured Depth h			Vertical Depth			Vertical	Dogleg	Build	Turh
(ft)	nclination (°)	Azimuth (°)	(ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
2.000.0		AND CONTRACTOR OF	0.000.4	a este a figure a seguina de la companya de la comp					
3,026.0 3,070.0	15.60 15.20	222.00 221.74	2,963.4 3,005.8	-382.6	-356.1	522.6	1.92	-1.63	-3.72
3,070.0 3,114.0	15.20	221.74	3,005.8 3,048.3	-391.3 -399.9	-363.9 -371.8	534,3 546.0	0.92	-0.91	-0.59
							1.54	0.91	4.68
3,158.0	16.20	225.10	3,090.6	-408.5	-380.2	558.0	1.59	1.36	2.95
3,202.0	16.60	224.60	3,132.8	-417.3	-389.0	570.4	0.96	0.91	-1.14
3,245.0	15.90	222.80	3,174.1	-426.0	-397.3	582.5	2.01	-1.63	-4.19
3,289.0	16.40	223.20	3,216.3	-435.0	-405.7	594.7	1.16	1.14	0.91
3,333.0	16.88	224.86	3,258.5	-444.0	-414.4	607.3	1.54	1.09	3.77
3,377.0	17.40	223.70	3,300.5	-453.3	-423.5	620.2	1.41	1.18	-2.64
3,421.0	17.40	221.70	3,342.5	-463.0	-432.4	633.4	1.36	0.00	-4.55
3,464.0	17.30	221.30	3,383.6	-472.6	-440.9	646.2	0.36	-0.23	-0.93
3,508.0	17.49	221.60	3,425.6	-482.4	-449.6	659.4	0.48	0.43	0.68
3,552.0	17.30	221.50	3,467.5	-492.3	-458.3	672.5	0.44	-0.43	-0.23
3,596.0	17.20	221.10	3,509.6	-502.1	-466.9	685.6	0.35	-0.23	-0.91
3,640.0	16.70	220.64	3,551.7	-502.1 -511.8	-400.9 -475.3	698.4	1.18	-0.23 -1.1 <b>4</b>	-1.05
3,684.0	16.30	219.50	3,593.8	-521.4	-473.3 -483.4	710.9	1.17	-0.91	-2.59
3,727.0	16.00	218.40	3,635.1	-530.7	-490.9	722.8	1.00	-0.70	-2.56
3,771.0	15.60	217.60	3,677.5	-540.1	-498.3	734.8	1.04	-0.91	-1.82
3,815.0	14.80	217.04	3,719.9	-549.3	-505.3	746.3	1.85	-1.82	-1.27
3,859.0	14.50	217.30	3,762.5	-558.1	-512.0	757.4	0.70	-0.68	0.59
3,903.0	14.00	216,70	3,805.2	-566.8	-518.5	768.1	1.18	-1.14	-1.36
3,947.0	13.40	216.40	3,847.9	-575.2	-524.7	778.5	1.37	-1.36	-0.68
3,990.0	13.20	217.10	3,889.8	-583.1	-530.6	788.4	0.60	-0.47	1.63
4,034.0	13.10	218.80	3,932.6	-591.0	-536.8	798.4	0.91	-0.23	3.86
4,078.0	13.00	217.70	3,975.5	-598.8	-542.9	808.3	0.61	-0.23	-2.50
4,122.0	12.92	217.44	4,018.3	-606.6	-548.9	818.1	0.22	-0.18	-0.59
4,166.0	12.80	219.40	4,061.2	-614.3	-555.0	827.9	1.03	-0.27	4.45
4,209.0	13.10	221.70	4,103.1	-621.6	-561.3	837.5	1.39	0.70	5.35
4,253.0	13.27	223.94	4,146.0	-628.9	-568.1	847.5	1.22	0.39	5.09
4,297.0	13.32	225.61	4,188.8	-636.1	-575.2	857.6	0.88	0.11	3.80
4,341.0	13.27	225.74	4,231.6	-643.2	-582.5	867.7	0.13	-0.11	0.30
4,385.0	13.54	225.52	4,274.4	-650.3	-589.8	877.9	0.62	0.61	-0.50
4,429.0	13.90	226.00	4,317.2	-657.6	-597.3	888.3	0.86	0.82	1.09
4,472.0	13.97	225.13	4,358.9	-664.9	-604.6	898.7	0.51	0.16	-2.02
4,516.0 4,560.0	13.54	222.80	4,401.6	-672.4	-611.9	909.1	1.59	-0.98	-5.30 0.30
4,560.0 4,604.0	13.36 13.36	222.93 220.86	4,444.4 4,487.2	-679.9 -687.5	-618.9 -625.7	919.4 929.5	0.41 1.09	-0.41 0.00	0.30 -4.70
4,647.0	14.19	218.93	4, <del>4</del> 67.2 4,529.0	-695.3	-625.7 -632.2	929.5 939.8	2.21	1.93	-4.70 -4.49
4,691.0	14.50	221.20	4,571.6	-703.7	-639.2	950.7	1.46	0.70	5.16
4,735.0	14.81	221.61	4,614.2	-712.0	-646.6	961.8	0.74	0.70	0.93
4,779.0	14.94	223.46	4,656.7	-720.3	-654.2	973.1	1.12	0.30	4.20
4,823.0	15.21	223.85	4,699.2	-728.6	-662.1	984.5	0.66	0.61	0.89
4,867.0	15.07	223.46	4,741.7	-736.9	-670.1	996.0	0.39	-0.32	-0.89
4,910.0	15.21	223.37	4,783.2	-745.1	-677.8	1,007.2	0.33	0.33	-0.21
4,954.0	15.38	223.32	4,825.6	-753.5	-685.8	1,018.8	0.39	0.39	-0.11
4,998.0	15.29	221.74	4,868.1	-762.1	-693.6	1,030.5	0.97	-0.20	-3.59
5,042.0	14.96	221.38	4,910.6	-770.7	-701.2	1,041.9	0.78	-0.75	-0.82
5,086.0	14.99	221.79	4,953.1	-779.2	-708.8	1,053.3	0.25	0.07	0.93
5,130.0	14.60	221.80	4,995.6	-787.6	-716.3	1,064.6	0.89	-0.89	0.02
5,173.0	14.24	220.64	5,037.2	-767.6 -795.6	-716.3	1,004.0	1.07	-0.84	-2.70
5,217.0	13.90	220.40	5,079.9	-803.7	-723.3 -730.3	1,086.0	0.78	-0.77	-2.70 -0.55
	14.28	222.45	5,122.6	-803.7 -811.8	-730.3 -737.4	1,096.7	1.43	0.86	4.66
			♥, I££.U	311.3	-101.7	.,500.1	1.70	0.00	7.00
5,261.0 5,305.0	14.50	221.90	5,165.2	-819.9	-744.7	1,107.6	0.59	0.50	-1.25



# **Payzone Directional**

Survey Report



Company: Project:

Design:

NEWFIELD EXPLORATION

USGS Myton SW (UT)

 Site:
 SECTION 2 T9, R15

 Well:
 Q-2-9-15

 Wellbore:
 Wellbore #1

Actual

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Database:

Well Q-2-9-15

Q-2-9-15 @ 6041.0ft (Capstar 329) Q-2-9-15 @ 6041.0ft (Capstar 329)

True

Minimum Curvature

EDM 2003.21 Single User Db

Measured	11.00	100	Vertical			Vertical	Dogleg	Build	Tum
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
Q-2-9-15						Name of the Control o			
5,348.0	14.40	222.45	5,206.9	-827.8	-751.9	1,118.3	0.39	-0.23	1.29
5,392.0	14.40	223.50	5,249.5	-835.8	-759.4	1,129.3	0.59	0.00	2.39
5,436.0	14.60	224.80	5,292.1	-843.7	-767.0	1,140.3	0.87	0.45	2.95
5,480.0	14.80	224.00	5,334.6	-851.7	-774.9	1,151.4	0.65	0.45	-1.82
5,523.0	14.90	223.50	5,376.2	-859.7	-782.5	1,162.4	0.38	0.23	-1.16
5,567.0	15.00	224.64	5,418.7	-867.8	-790.4	1,173.8	0.71	0.23	2.59
5,611.0	15.10	222.20	5,461.2	-876.1	-798.2	1,185.2	1.46	0.23	-5.55
5,655.0	15.20	220.40	5,503.7	-884.8	-805.8	1,196.7	1.09	0.23	-4.09
5,699.0	14.94	217.40	5,546.2	-893.7	-813.0	1,208.1	1.87	-0.59	-6.82
5,742.0	14.80	216.90	5,587.7	-902.5	-819.7	1,219.1	0.44	-0.33	-1.16
5,786.0	14.60	217.40	5,630.3	-911.4	-826.4	1,230.2	0.54	-0.45	1.14
5,830.0	14.60	218.80	5,672.9	-920.1	-833.2	1,241.3	0.80	0.00	3.18
5,874.0	14.80	218.70	5,715.4	-928.8	-840.2	1,252.5	0.46	0.45	-0.23
5,918.0	15.30	219.50	5,757.9	-937.7	-847.4	1,263.9	1.23	1.14	1.82
5,961.0	15.56	218.80	5,799.4	-946.5	-854.7	1,275.3	0.74	0.60	-1.63
6,005.0	15.38	219.20	5,841.8	-955.7	-862.0	1,287.0	0.48	-0.41	0.91
6,049.0	15.70	217.60	5,884.2	-964.9	-869.4	1,298.8	1.22	0.73	-3.64
6,093.0	15.40	218.40	5,926.5	-974.2	-876.6	1,310.5	0.84	-0.68	1.82
6,137.0	14.63	217.92	5,969.0	-983.2	-883.7	1,321.9	1.77	-1.75	-1.09
6,180.0	14.88	218.26	6,010.6	-991.8	-890.4	1,332.8	0.62	0.58	0.79
6,224.0	13.58	216.47	6,053.3	-1,000.4	-897.0	1,343.6	3.12	-2.95	-4.07
6,268.0	12.48	216.38	6,096.1	-1,008.3	-902.9	1,353.5	2.50	-2.50	-0.20
6,312.0	11.34	213.44	6,139.2	-1,015.8	-908.1	1,362.5	2.93	-2.59	-6.68
6,355.0	10.59	212.51	6,181.4	-1,022.6	-912.5	1,370.6	1.79	-1.74	-2.16
6,373.0	10.28	213.09	6,199.1	-1,025.4	-914.3	1,373.8	1.82	-1.72	3.22
6,428.7	10.28	213.09	6,253.9 ⊖.પ	-1,033.7	-919.7	1,383.6	0.00	0.00	0.00

Checked By:	Approved By:		Date:	



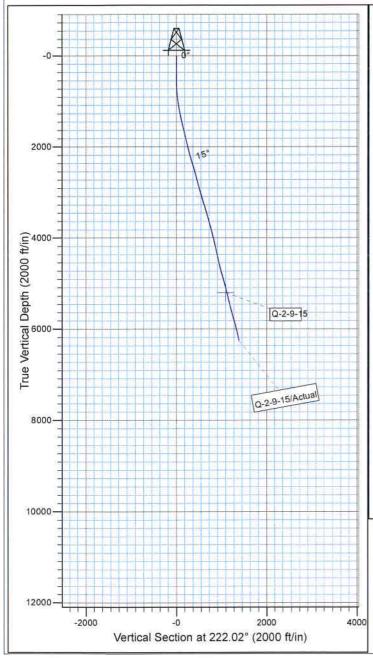
Project: USGS Myton SW (UT) Site: SECTION 2 T9, R15

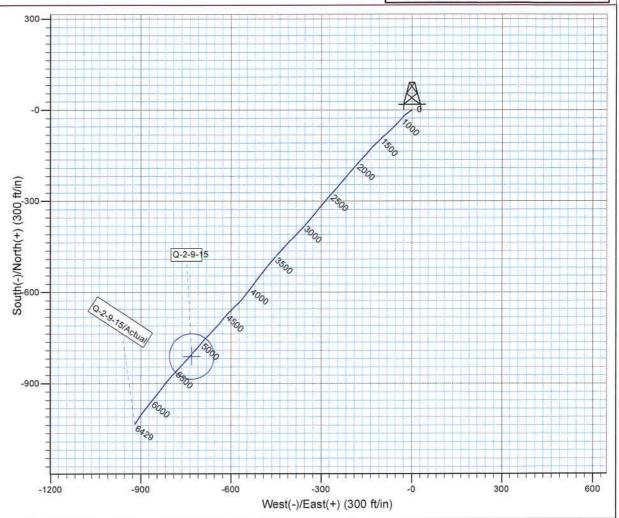
Well: Q-2-9-15 Wellbore: Wellbore #1 Design: Actual



Azimuths to True North Magnetic North: 11.37°

Magnetic Field Strength: 52252.3snT Dip Angle: 65.78° Date: 6/20/2011 Model: IGRF2010







Design: Actual (Q-2-9-15/Wellbore #1)

Created By: Sarah Well

Date:

15:58, February 18 2012

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA